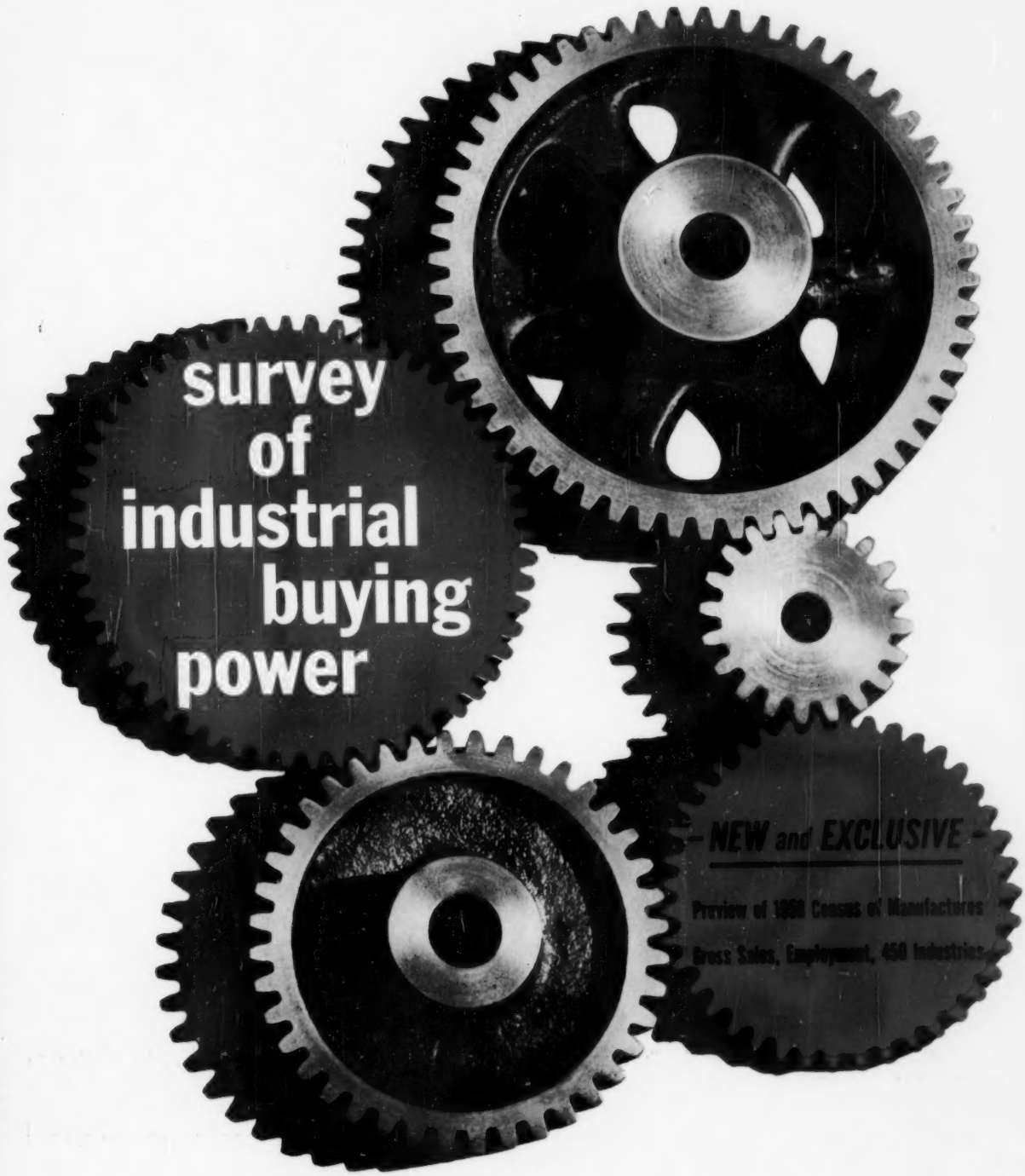
JULY 10, 1959 $2.00

Sales Management

THE MAGAZINE OF MARKETING





NEW MARKET DATA STUDIES YOU CAN USE

These recent Nation's Business surveys of the buying plans and of the corporate personalities of companies in various fields are proving valuable to advertising and marketing men. Use the handy coupon to secure the studies most useful to you.

Behind these surveys stands the authority of the owner-executives' all-business magazine. Nation's Business is edited for the presidents, owners, partners of firms of all sizes, in all fields of business and industry. This is where ownership-motivated men look for useful ideas . . . for solutions to problems . . . for articles that keep them abreast of the rapidly changing business scene . . . help them map their course for the future. Your advertising belongs in the hands of these owner-executives who read, use and believe in Nation's Business!

4

Buying Plans of

PRIVATE ELECTRIC UTILITIES

5

Buying Plans of

LARGE BAKERIES

6

Use of

DATA PROCESSING EQUIPMENT

10

Buying Plans of

CONSTRUCTION EQUIPMENT DISTRIBUTORS

11

Buying Plans of

DAIRY PRODUCTS MANUFACTURERS

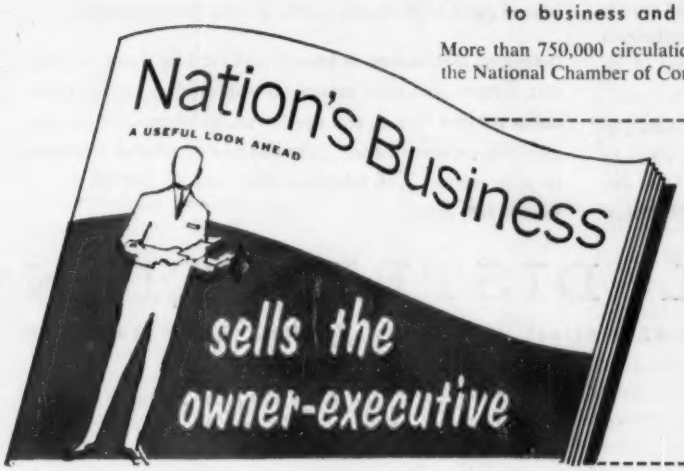
12

Buying Plans of

INDUSTRIAL DISTRIBUTORS

ACTION IN BUSINESS **results when you advertise to business and industry in *NATION'S BUSINESS***

More than 750,000 circulation, ABC . . . 10% executives of business-members of the National Chamber of Commerce and 90% other business and industrial leaders.



NATION'S BUSINESS, Room 1602-B
711 Third Ave., N.Y. 17, N.Y.

Please send me the studies which I have circled.

1 2 3 4 5 6 7 8 9 10 11 12 13

Name_____

Position_____

Firm_____

Address_____

City_____ Zone____ State____

INDUSTRIAL DISTRIBUTORS

SELL

96.7% of all Light Machine Tools
99.3% of all Hacksaw Blades
87.8% of all Couplings and Clutches
99.3% of all Band and Circular Saws
89.9% of all Electric Hoists
95.2% of all Nuts and Bolts
89.2% of all Safety Equipment
85.4% of all Portable Cutting Tools

Today, aircraft to textiles . . . in oil, construction, transportation, utilities . . . more and more buyers are doing business with distributors. And they're buying everything from supply items to sizeable production equipment. The distributor's share of sales grows steadily. Here, unquestionably, is industry's primary selling force.

Your customers and prospects like to do business with distributors. The distributor salesman is a local man, close to local conditions, Johnny-on-the-spot with service. You like him, too . . . he makes more calls per day, gets in faster, uses precious selling minutes more profitably than the average manufacturer's man. Last year he and his brothers moved close to $4 billion worth of industrial products.

Industrial Distribution is bought and read by those leading distributors (and their salesmen) who do 85% of the total dollar volume. Use it, and use it well, to inform and inspire your present distributors . . . to add new distributor strength to your selling . . . to introduce new lines or new ideas . . . to sell, sell, sell!

INDUSTRIAL DISTRIBUTION

A McGraw-Hill Publication • 330 West 42nd Street • New York 36, New York • (ABC-ABP)

Sales Management

THE MAGAZINE OF MARKETING

JULY 10, 1959 VOLUME 83, NO. 2

CONTENTS

The *Survey of Industrial Buying Power*

With this issue, the *Survey* scores another first in the field of market research—by publishing 1958 employment and shipment data *in terms of the New SIC codes that will not be used officially until the release of the results of the 1958 Census of Manufactures.* In addition to this "preview" of the census, it presents updated data on plant location and employment in every 4-digit industry 13

How Advertisers Can Use the SIC

The SIC, by bringing specific markets quickly into focus, speeds up and sharpens advertising planning, especially in the area of budget determination and media selection 20

20 Points to Check in Plant Location

Check-list developed by Cleaver-Brooks Co. as a guide in multi-phase expansion program. Alongside the checkpoints are comments by the executive vice president and general sales manager tying the criteria in with the marketing operation 30

Successful Introduction of Industrial Products

Early determination of the potential market and adoption of correct sales policies can mean the difference between dominating an embryo market or merely participating in it. Here's a blueprint of survey methods, including use of SIC, to obtain the needed information and channel it to the right departments 32

SM State Directories

An up-to-date list of state directories compiled by SALES MANAGEMENT. Each listing includes description of contents and special data code which indicates, among other things, whether the directory employs SIC designations 44

From the Old to the New 1957 SIC

An information-packed article by Dr. Harold T. Goldstein, Coordinator, Industry & Commodity Classification, Bureau of the Census, to help SIC users make the transition from the old to new codes. He explains the structure of SIC, tells why and how it has been changed in the new SIC manual 53

How to Sell the SIC

Series of "prefaces", by purchasing agents of well known companies, to the major groups of 4-digit industries in the Leading Counties section 86-148

SM Employment, Sales, Plant Data 62-149

Employment and Sales by New Code Classifications: SM estimates of 1958 Employment and Value of Products Shipped for the newly defined SIC 4-digit industries. **Leading Counties:** Last year, SM developed for the first time anywhere estimates of Employment and Plants for each of the 4-digit industries. In this issue, this valuable marketing tool has been updated.

	Empl't, Shipments	Empl't, Plants
Food & Kindred Products (SIC 20)	65	86
Tobacco Products (SIC 21)	65	89
Textile Mill Products (SIC 22)	66	90
Apparel & Related Products (SIC 23)	69	93
Lumber & Products (SIC 24)	69	96
Furniture & Fixtures (SIC 25)	70	98
Paper & Allied Products (SIC 26)	70	99
Printing & Publishing (SIC 27)	71	100
Chemicals & Allied Products (SIC 28)	71	102
Petroleum & Coal Products (SIC 29)	72	106
Rubber Products (SIC 30)	74	108
Leather & Products (SIC 31)	74	109
Stone, Clay, Glass Products (SIC 32)	74	110
Primary Metals (SIC 33)	75	112
Fabricated Metals (SIC 34)	76	114
Machinery Except Electrical (SIC 35)	78	119
Electrical Machinery (SIC 36)	80	124
Transportation Equipment (SIC 37)	81	129
Instruments & Related Products (SIC 38)	81	132
Miscellaneous (SIC 39)	82	135
Total Manufacturing		138*
Mining		138*
Contract Construction		140*
Public Utilities		144*
Wholesale Trade		146*
Retail Trade		147*
Finance, Insurance, Real Estate		147*
Service Industries		148*

*Employment only



When an Executive Moves.

time is precious!

The challenge of a new job and new responsibilities leave him little time for the troublesome details of moving. He wants a service geared to the special needs of the busy decision-maker.

That's why the modern executive on the move... his family and his company... prefer the time-saving convenience of United's "Pre-Planned" service. And you will, too!

Call the United Agent in your community for a safer, easier, more pleasant moving day. He's listed under "MOVERS" in the Yellow Pages.

United Van Lines

United

United Van Lines

MOVING WITH CARE *Everywhere*

Sales Management

EXECUTIVE OFFICES 630 Third Avenue
New York 17, N.Y. YUkon 6-4800

EDITORIAL AND PRODUCTION STAFF FOR INDUSTRIAL SURVEY OF BUYING POWER

PUBLISHER AND EDITOR ..... Philip Salisbury
MANAGING EDITOR ..... Robert C. Nicholson
PLANNING EDITOR .... Christopher A. Anderson
DIRECTOR OF RESEARCH .... Dr. Jay M. Gould
ASSOC. DIR. OF RESEARCH ..... Alfred Hong
CONSULTING ECONOMIST .. Peter B. B. Andrews
RESEARCH ASSOCIATES ..... Elaine Brown
Dorothy Carr
PRODUCTION MANAGER .. Madeleine Singleton
READER'S SERVICE BUREAU .... H. M. Howard

SUBSCRIPTIONS

DIRECTOR ..... R. E. Smallwood
ASSISTANT DIRECTOR .... Edward S. Hoffman
SUBSCRIPTION MANAGER ..... C. V. Kohl

U.S. and Canada, $10.00 a year; Foreign $15.00
Industrial Survey only, $2.00

OFFICERS

PRESIDENT ..... John W. Hartman
TREASURER ..... Ralph L. Wilson
VICE PRESIDENT, SALES ..... Randy Brown
SENIOR VICE PRESIDENTS .... C. E. Lovejoy, Jr.
W. E. Dunsby
R. E Smallwood
Wm. McClenaghan

BILL BROTHERS PUBLICATIONS

Bill Brothers Publications in MARKETING (in addition to Sales Management): Sales Meetings, Premium Practice. INDUSTRIAL: Rubber World, Plastics Technology. MERCHANDISING: Fast Food, Floor Covering Profits and Modern Tire Dealer.

ADVERTISING SALES

Offices and personnel listed in Advertisers' Index

SALES MANAGEMENT, with which is incorporated PROGRESS, is published semi-monthly on the first and third Friday of every month, except in May, July, September and November, when a third issue is published on the tenth of the month. Affiliated with Bill Brothers Publishing Corp. Publication (printing) offices, 3rd St. and Hunting Park Ave., Phila., Pa. Address mail to New York office. Entered as second class matter May 27, 1942 at the Post Office, Philadelphia, Pa. under the act of March 3, 1879.

Copyright, Sales Management, Inc., 1959

PICK A CARD—ANY ONE OF THOUSANDS



KARD·VEYER®

MECHANIZED RECORD HANDLING SYSTEM

APPROVED BY UNDERWRITERS' LABORATORIES INC.

by Remington Rand

Here's a record control center with push-button automation. The new fully mechanized KARD-VEYER record handling system delivers the right card out of thousands . . . *at the touch of a button!*

These all-in-one, electrically-powered, fatigue-reducing work stations are revolutionizing record handling operations. Never before has it been possible to store so many card records in so little space. Filing, finding and posting are done in seconds, keeping files more up-to-date. The result is increased efficiency and greater productivity with reduced personnel.

KARD-VEYER units offer the greatest flexibility in the choice of models and card record sizes to meet your particular needs. Write for full details.


Free from Vibration . . . Whisper Quiet


No shadows obstruct visibility.

REMINGTON RAND
DIVISION OF SPERRY RAND CORPORATION
Room 1722, 315 Park Ave. So., New York 10.

Please send me free folder LBV811 on KARD-VEYER equipment.

Name & Title_____

Company_____

Address_____

City_____ Zone____ State_____



How many executives
should be reading
your advertising
right now
?

THERE'S no precise answer to this question, of course. All companies have different markets, and different objectives. But there's a good over-all clue in a recently completed study of new car buyers.*

This study showed that of the 4.3 million buyers of new cars last year, 1,160,000 of them were managerial or professional people with incomes of $10,000 or more.

Now, to be sure, not every executive buys a new car every year, not even the most successful ones. The new-car study, therefore, points to the *minimum* size of the managerial market in the U. S. today. But the figure of 1,160,000 is not far off. Another important marketing study, "How Business Buys," for example, pegs the number of key managerial people as being in the neighborhood of 1,225,000. Whatever the exact figure, this much is certain: the managerial market is far bigger than any 200,000, or 300,000, or 400,000.

"U.S.News & World Report" delivers highest concentration of managerial people at lowest cost

The three news magazines have always attracted high-income managerial and professional men and their families. It would be difficult to imagine the home of a successful businessman without one of the news magazines.

Of the three news magazines, "U.S.NEWS & WORLD REPORT" has the highest concentration of managerial and professional subscribers—88%. Family incomes average $15,009—highest of *all* magazines with more than 1,000,000 circulation.

It naturally follows that "U.S.NEWS & WORLD REPORT" enables advertisers to cover these high-income managerial people at lowest cost. That is one more reason why "U.S.NEWS & WORLD REPORT" carries more pages of advertising directed to business and industry than any other news magazine.

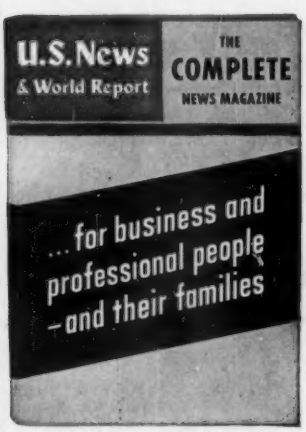
Example of how "U.S.News & World Report" does the best job of covering management executives

Almost half—540,000 to be exact—of the managerial or professional buyers of new cars last year were in the top management group—presidents, vice presidents, treasurers, etc. Surely, these are the key decision-makers who have "arrived," and whose ideas and okays are so important to any business contract. Here are the results of the study on the magazines read by these top management buyers of new cars:

News magazines read regularly by 540,000 top management executives who bought a new car	Rank in coverage of top management executives	Coverage cost per top management executive (4-color page)
"USN&WR"	1st (183,600)	4.1 cents
News Magazine "B"	2nd (167,400)	10.4 cents
News Magazine "C"	3rd (135,000)	6.9 cents

These figures are one more research confirmation of this simple fact: advertisers wanting to cover America's high-income people of importance most effectively *and* economically do so today through the advertising pages of "U.S.NEWS & WORLD REPORT."

*From "A Market Study of the People Buying New Automobiles Today," conducted jointly by the Market Research Division, Advertising Department, "U.S.NEWS & WORLD REPORT," and Benson & Benson, Inc., Princeton, N. J.



U.S.NEWS & WORLD REPORT

America's Class News Magazine

Ask your advertising agency, or write, for your copy of "Portrait of Today's Successful Businessman." It tells how he can be identified, how he can be covered. Advertising offices at 45 Rockefeller Plaza, New York 20, N. Y. Other advertising offices in Boston, Philadelphia, Pittsburgh, Cleveland, Detroit, Chicago, St. Louis, Los Angeles, San Francisco, Washington and London.

Now more than 1,100,000 net paid circulation

CONSUMER PACKAGING
(the market)

lets you buy almost any consumer product today in a waste-free, convenient unit tailored to your requirements.

CONSUMER PACKAGING
(the publication formerly Packaging Parade)

now offers you this same economy and convenience of buying waste-free coverage.

CONSUMER PACKAGING
(the $10 billion market)

includes ALL those who package goods for retail distribution, vending and institutional.

CONSUMER PACKAGING
(in marketing and production)

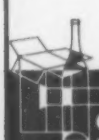
differs from industrial packaging and package manufacturing. If you also want to reach these related but separate markets

CONSUMER PACKAGING
(the publication)

has two companion magazines in the Haywood packaging group which cover these markets with the same specialized hand-tailored approach and penetration to the most advantageous depth.

CONSUMER PACKAGING
(the publication)

enables you in the field of
CONSUMER PACKAGING
to reach the men who make the important buying decisions in those companies which package products for retail distribution, vending and institutional use.



(a Haywood Publication)
CONSUMER PACKAGING
6 N. MICHIGAN AVE. · CHICAGO 2, ILL.
CEntral 6-3690

A Contribution to

Sound Industrial Selling

Last year on this page I applauded our research staff on a scoop—for the first time in history an up-dated record of employment for leading counties in approximately 450 four-digit Standard Industrial Code (commonly referred to in this volume and elsewhere as "SIC") classifications.

This year our Dr. Jay M. Gould and his staff, along with Peter B. B. Andrews, our consulting economist, deserve an accolade for further pioneering.

Over a period of years government officials, with the advice of private industry, have been working on a revision of the SIC classifications so as to reflect the many new types of industry which have started up since 1940, and the fragmentizing of older industries. This past spring the Bureau of the Census has been gathering data for 1958 based upon the new codes. Some time in 1960 the official figures may be available.

But in this July 10 issue SALES MANAGEMENT's research staff has *anticipated* the official figures by making employment and gross sales estimates according to the revised codes. This is a real "first."

Knowing as I do the available data from which they worked, and the know-how and the painstaking care taken in the work, I say that their estimates will turn out to be sufficiently accurate for quota setting and advertising allocation purposes.

What we are publishing is, necessarily, because of lack of space, a digest of the data available on all counties (although for most code numbers the top counties shown in this issue represent a substantial part of the U.S.A. total.) The material not published is available to subscribers on I.B.M. cards at a reasonable charge. There are almost countless permutations and combinations of these data. For example, it is possible to sort out the cards so as to give a complete picture of plants and employment for any county or any group of counties representing a marketing area or a salesman's territory.

Also, on this subject of SIC figures, be sure to read the section starting on page 53 where Dr. Harold T. Goldstein, of the Bureau of the Census, explains the changes in the new code system over the old, and on page 13, Dr. Gould's introduction to this year's estimates.

Continuing on the interpretation and use of Standard Industrial Code figures, we commend the article on page 20 on how advertisers and advertising agencies can best use SIC data, prepared by two executives of the firm of Marsteller, Rickard, Gebhardt and Reed, Inc., an advertising agency which specializes, and very successfully, in the industrial field.

SIC figures, to be truly useful, must be related to plants, and the SM staff has analyzed and briefly described all current state directories, starting on page 44.

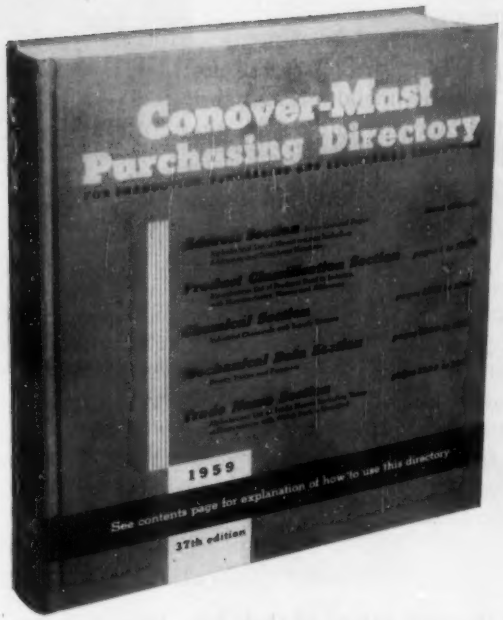
Rounding out the array of information on industrial sales planning is the John Newitt article, page 32, dealing with the successful introduction of new industrial products, plus the page 30 presentation of 20 points to check when you select a plant location.

This is our third annual *Survey of Industrial Buying Power*, and we are rather proud of it. But you are the real judge. We await your reactions.

PHILIP SALISBURY
Publisher and Editor

Conover-Mast
Purchasing Directory

Backs up your salesmen



CONOVER-MAST PURCHASING DIRECTORY gives the industrial buyer everything he needs to make buying easy. Your advertisement makes it easy for him to *buy from you.*

CMPD gives all information in one handy volume. *(Exclusive!)*

CMPD gives the telephone numbers of manufacturers selling to industry. *(Exclusive!)*

CMPD gives size ratings by employment. *(Exclusive!)*

CMPD gives important mechanical data. *(Exclusive!)*

Conover-Mast
Purchasing Directory

New York—205 E. 42nd St., New York 17 ..... MUrray Hill 9-3250
Chicago—737 N. Michigan Ave. ..... WHitehall 4-6612
Cleveland—1900 Euclid Ave. ..... CHerry 1-7788
Los Angeles—864 S. Robertson Blvd. ..... OLeander 5-9580
Detroit—15817 James Couzens H'way ..... Diamond 1-8811
Philadelphia—510 Gainsboro, Drexel Hill ..... CLearbrook 9-2595
Philadelphia—537 Rock Glen Dr. Wynnewood ..... MIdway 9-2619
Massachusetts—Water St., Foxboro, Mass. ..... Kingswood 3-2051
Cincinnati—84 Burdsall; So. Fort Mitchell, Ky. ..... EDison 1-2102
New Jersey—Box 389, Normandy Beach ..... ORange 4-6001
Connecticut—34 Prospect St., Essex, Conn. ..... SOuth 7-8350
Wisconsin—5301 N. Hollywood Ave., Milwaukee ..... WOodruff 2-1623
Southern States—Box 643, Anderson, S. Carolina

Directory advertising gives your prospect information about your product at the critical time when he is ready to buy. Directories are right in the prospect's office eight hours a day. Directories are available when your salesmen cannot be present.

The N.I.A.A. "Survey of Industrial Buying Practices" showed directories were Number One in making the *original* contact between buyer and seller. Give your salesmen the benefit of these "original contacts" as produced by good industrial directories.

Conover-Mast Purchasing Directory gives most complete coverage of industry.

Planned Minimum Plant Coverage	
Mchy., except elec.	6,625
Electrical Mchy.	3,094
Transport. Equip.	2,485
Instruments	1,138
Primary Metals	1,488
Fabricated Metals	2,271
Ordnance	190
Chemical	1,264
Furniture	393
Petroleum & Coal	174
Rubber Prods.	326
Misc. Mfg.	337
Paper	224
Leather	105
Stone, Clay, Glass	159
Lumber	82
Food	320
Tobacco	39
Textile	151
Apparel	26
Printing	85
Minimum Plant Coverage	20,976

This is the minimum *plant* coverage planned for 1959. Total circulation will be considerably higher as many plants will receive more than one copy.

This circulation will give exceptionally good coverage of the important OEM and metalworking markets.

Additional coverage will be given the larger utilities, mines, railroads, industrial distributors, and government, including the military.

Total Circulation, Dec., 1958 BPA... 25,856

Who cares what happens to METALS?

Dr. Ralph Leiter, for example, Director of Laboratories at Philadelphia headquarters of The Budd Company, metalworking fabricators of components and end-products for the railroad, automotive, aircraft, missile and atomic energy industries.

Together with his staff of engineers and metallurgists—metals engineers—Dr. Leiter has been active in such diverse areas as developing alloys for Budd railway disc brakes; determining the best mass production forming and welding processes for auto bodies, chassis, wheels and brakes; and selecting, testing, forming, fabricating and heat-treating high temperature parts for missiles, rockets and jet engines. A major achievement is their development of a resistance-welded stainless steel corrugation-reinforced and sandwiched structure called "Integrated Core Panel", now being applied to a critical nuclear program and under test for supersonic aircraft for its high strength-to-weight ratio and resistance to heat.

By the very nature of their jobs, these men are fundamentally concerned with specification and purchasing decisions affecting metals. They are part of a larger group of 30,000 metals engineers across the nation whose job it is, similarly, to care what happens to metals—to take an influential interest in metals selection, processing, fabrication, etc. METAL PROGRESS anticipates their needs. They learn from it... depend on it... contribute to it. Reason enough that METAL PROGRESS is *also* your best advertising approach to this vital market in 1959.



Dr. Leiter heads an extensive staff of metals engineers. Here he inspects a forged and butt-welded compressor ring of a Pratt & Whitney Aircraft J57 turbo-jet engine with Chief Metallurgist Charles B. Allen (L) at Budd's Red Lion Plant.



Marjorie R. Hyslop
Managing Editor



DISCUSSING
◀ a stamped, formed and fusion-welded high temperature jet engine component currently under manufacture at Budd.

INSPECTING
a disc-type brake on the truck of a Budd-designed RDC self-propelled Rail Diesel Car. ▶





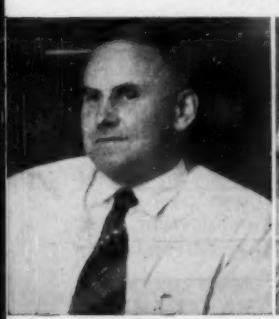
EXAMINING
◀ a Sciaky Modu Wave Machine roll-welding operation on a Pratt & Whitney Aircraft engine afterburner.

Engineers who care what happens to metals read...

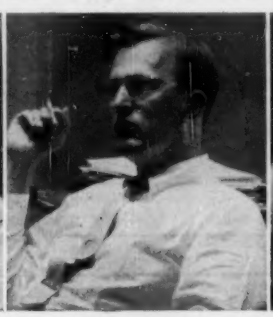
Metal Progress

Published by The American Society for Metals
7301 Euclid Avenue • Cleveland 3, Ohio

Write for a METALS ENGINEERING FACTOR ANALYSIS on your products



David F. Ritchie
Assistant Editor



Carl R. Weymueller
Assistant Editor



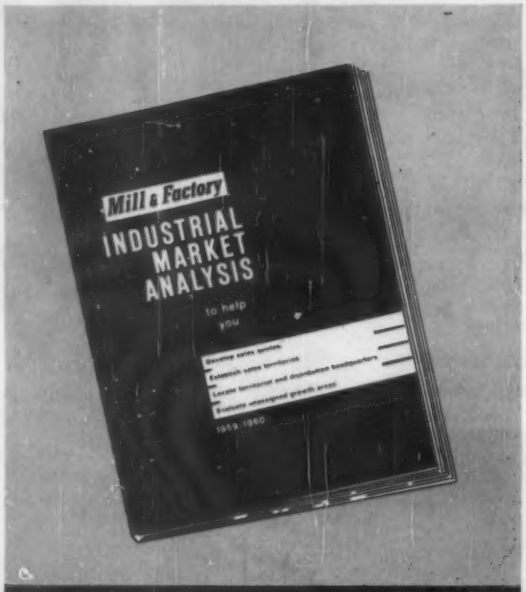
Dr. Allen G. Gray
Editor



Ernest E. Thum
Editor-in-Chief



With an unmatched technical knowledge and six years of Eastman research, the editors of Metal Progress *know* what 30,000 metals engineers must read.



Mill & Factory's NEW Industrial Market Analysis

FREE for the asking. Write or use the handy coupon below.

here's help in planning your marketing strategy

This 40-page booklet provides further data, covering:

Regional Distribution of the Industrial Market as Measured by Manufacturing Employment

Manufacturing Employment in Each State—1939 Compared to 1959

Number of Manufacturing Establishments in Each Industry, Divided by Employee Size Groups

Number of Manufacturing Establishments in Each Industry, Divided by Employee Size Groups, by Individual States

The Major Industrial Trading Areas of the United States

How to Figure Territorial Sales Quotas

How to Get a Picture of the Industrial Composition of Each Area

How Much of Each Industry is in Each State, as Shown by Manufacturing Employment

What and How Much of Each Industry Makes Up the Industrial Market in Each Region and State

you can use this new analysis to:

Calculate national sales quotas

Establish sales quotas for sales territories

Determine how many salesmen are needed in a given area

Plan how many distributors are required—and where

Locate branch plants and warehouses

Apportion advertising costs by sales territories

Design your advertising program to obtain maximum value per advertising dollar

Mill & Factory NBP BPA

Serving Production & Maintenance Engineering
a Conover-Mast Publication

MILL & FACTORY
205 East 42nd Street, New York 17, New York
Please send me a copy of the new Industrial Market Analysis.

name _____ title _____

company _____

address _____

city _____ zone _____ state _____



Sales Management

Survey of Industrial Buying Power

JULY 10, 1959

In this, the third annual issue devoted entirely to industrial marketing, the editors of SALES MANAGEMENT offer two useful tools for measuring industrial markets. In last year's issue we had broken new ground by developing, for the first time in history, estimates of employment and plants by county, for each of nearly 450 four-digit SIC industry classifications. These figures have been updated in this issue.

Preview of 1958 Census

In this issue we offer in addition estimates of employment and shipments for 1958, which we believe will come close to the results of the 1958 Census of Manufactures, whose release is scheduled to start at the end of the year. With the help of Peter B. B. Andrews, we have for several years been able to offer such advance estimates, in terms of the old 4-digit SIC classification in use in the 1947 and the 1954 Censuses of Manufactures. In 1957, the Office of Statistical Standards of the Bureau of the Budget prepared a new set of industry definitions, published in the "Standard Industrial Classification Manual", which will be used for the first time in the 1958 Census of Manufacturers. We are fortunate in having Mr. Goldstein, of the Census Bureau, contribute to this issue a definitive article on the background and significance of the new SIC code.

At the same time, Mr. Goldstein has prepared a tabulation of the 1954 Census employment data showing the relation of the old codes to the new in terms of 1954 employment. We were able to take our 1958 projections of employment and shipments (old code) and, using the 1954 relationships between old and new industries, make our own 1958 estimates of employment and shipments for the newly defined SIC industries. It is in this sense that we can say that the resulting estimates are "previews" (because they are directly comparable) of the results of the 1958 Census.

Both Mr. Goldstein's article and the basic table showing the relation of old to new SIC codes will be used extensively in the next few years to reconcile the two codes in the classification of prospects by industry. These two tools greatly simplify an otherwise difficult task. Most of the industries do not undergo any change; for those undergoing radical revision, the change, as Mr. Goldstein points out, is in the direction of improvement and recognition of an advancing technology requiring greater precision in definition. In the transition period marketing people will be required to work according to both old and new codes.

In fact, the initial releases of the 1958 Census will be in terms of the old code, which the Bureau will then convert to the new code with the help of their high-speed magnetic tape computers. Although these new computers will make for a greater speed of release, it will probably not be until well into 1960 before the Bureau will release the 1958 data on employment and shipments in terms of the new SIC Codes.

4-Digit County Rankings

The old codes are still used for our county rankings, since it will take time for the results of the 1958 Census to lend themselves to this degree of analysis. These updated county rankings, however, though still based on the old codes, will remain the best tool available for pinpointing industrial projects for several years to come. The manner in which this may be done will be described in detail below.

In the year since the first appearance of the 4-digit county rankings, our research department has encountered remarkable evidence of the usefulness of this material to hundreds of industrial companies that have phoned, corresponded, even spent time and money to come in and pore over the thousands of sheets of unpublished material that underlie the published rankings. On the basis of this response we can affirm with pride that the 4-digit rankings constitute perhaps the most useful single development in industrial marketing over the past decade. (Incidentally, our 1958 Industrial Survey won one of the coveted Neal Awards for Editorial Achievement sponsored by the Associated Business Publications).

In our estimates of the value of products shipped, the lack of Census 1954-base figures created problems in certain important four-digit industries which we did not wish to omit from the Survey. Accordingly, we obtained estimates by surveying the 311-man panel of SALES MANAGEMENT Board of Analysts of Future Sales Ratings and developing a mathematical consensus for each individual industry.

We were thus able to include in the *Survey* such important industries as blast furnaces of steel mills, primary copper, primary lead, motor vehicles and parts, refrigeration machinery, full-fashioned hosiery mills, and wool carpets and rugs. The absence, in these cases, of 1954-base information from the Census Bureau arose logically from the nature of the industries involved and the essential procedures of the Bu-

Explanation of the SIC

SIC stands for the Standard Industrial Classification, a numerical system set up by the Federal Government to classify different segments of industry by products.

It is presented in great detail in: Standard Industrial Classification Manual, Volume I, "Manufacturing Industries," Superintendent of Documents, United States Government Printing Office, $2.25.

An industry can be classified on either a 2-, 3-, or 4-digit basis. The more digits the finer the classification. Examples of 2-digit classifications (based on revisions to take effect in the 1958 Censuses) are: Food and Kindred Products, 20; Tobacco Manufacturers, 21; Primary Metal Industries, 33, etc. Broad categories (from 19 to 39) cover all manufacturing industries. Each of them is refined into 3- and 4-digit categories.

For example, in Food and Kindred Products (SIC 20) you find 3-digit groups, such as 201, Meat Products; 202, Dairy Products; 205, Bakery Products, etc. The 3-digit classifications are further refined into 4-digit groups. Dairy Products, 202, for example, breaks down into 2021, Creamery Butter; 2022, Natural Cheese; 2023, Condensed and Evaporated Milk.

2-Digit	3-Digit	4-Digit
20 Food and Kindred Products..	201 Meat Products	2011 Meat Packing Plants
		2013 Prepared Meats
		2015 Poultry Dressing, Wholesale
	202 Dairy Products	2021 Creamery Butter
		2022 Natural Cheese
		2023 Condensed, Evaporated Milk

reau. A summation of industry values of shipments of these industries would contain large and unknown amounts of duplication, since shipments reported by related industries engaged in successive fabrication states of the product's manufacture could be reported.

Within the 4-digit range of industries covered in this *Survey*, however, any such duplication is insignificant, with the exceptions largely of those mentioned in the preceding paragraphs. In the 1954 figures computed by the Board of Analysts, the inevitable overlap with related industries is believed not to exceed 25 in any instance.

Estimates of the various 1958 data included checking by Government economists and statisticians, and the average percentage changes in employment and shipments which were worked over 1954 also had the benefit of judgment by private industry experts.

The final 1958 figures, while estimates, are as soundly and extensively based as possible, and represent the only available current figures of their kind in this comprehensive series.

The term "Value of Products Shipped" means net selling value, f.o.b. plant, after discounts and allowances, of all shipments of products from manufacturing establishments of an industry, plus receipts for miscellaneous activities of such plants. It also excludes freight charges and excise taxes.

Products transferred to other establishments of the same company (such as other manufacturing plants, separate sales branches, or retail dealers) are valued at the nearest approximation to the commercial selling value, f.o.b. plant, and not the cost of production. It should be noted, therefore, that for establishments classified in a given industry the value of shipments includes not only (a) their value of products primary to the industry but also (b) their value of secondary products (which are primary to other industries) and (c) their miscellaneous receipts for repair work, sales of scrap, installation of own products, receipts for contract work, etc. Excluded from the value of shipments are sales of products bought and resold in the same condition.

Basically what we now have is a listing broken down by 4-digit codes, of every manufacturing plant in the country, including its average employment and the county where it is located. This covers all plants, large or small, but our directory of actual plant names is necessarily limited to large plants (with over 1,000 employes). We have found that for analytical marketing programs the question of plant names is secondary. Once you have pinpointed the types of industry and areas of interest, the selection of plant names comes quite quickly, through reference to state directories.

An oil company serving the states of New Mexico and Texas wanted to establish potentials for its line of industrial lubricants. Through an analysis of its customer records the marketing department of the company established consumption ratios (in terms of gallons per employee) for each of about 200 separate 4-digit industrial classifications. From our estimates of employment by county in each of these 200 industries, the company was able to prepare estimates of potential for each county. In the case of certain large counties, such as Harris, the potential derived was the sum of about 250 components, one for each 4-digit industry in the county.

A potential derived in this way has a high degree of accuracy, for two reasons. First, when a total is built up on the basis of many components, random errors have the chance to cancel themselves out. Secondly, a potential will be generated only on the basis of the existence in an area of a plant, and the magnitude will be determined by the size of the plant as reflected by employment. Anyone disputing the validity of such a potential would have a heavy burden proving, for example, that particular plants of a given size should not be regarded as prospects.

The example cited above represents the most accurate procedure for preparing industrial potentials, but it must be conceded that use of this method on a national scale would involve a trememdous volume of de-

Can You Identify These Plants by SIC Code?

From the Sales Management file of plants classified by 4-digit SIC, we have selected a representative group below. These are all large and important plants. Given the plant name, size in terms of employment, state and county in which it is located, and major product, can you select the proper 4-digit SIC code? The answers, given in terms of the old SIC code, will be found on page 36.

	Company or Plant Name	Chief Product	County and State	Employment 1958 (thou.)	
1.	Gerber Products	Baby Food	Muskegon, Mich.	3.0	
2.	Standard Brands	Yeast, Soup	Westchester, N. Y.	.8	
3.	P. Lorillard Co.	Tobacco Products	Jefferson, Ky.	1.6	
4.	E. I. Du Pont	Nylon Yarns	Hamilton, Tenn.	3.0	
5.	Cluett-Peabody	Shirts	Franklin, Pa.	1.8	
6.	Hanes Knitting	Underwear	Forsyth, N. C.	2.0	
7.	Champion Paper	Paper Products	Butler, Ohio	4.3	
8.	Dixie Cup	Paper Cups	Sebastian, Ark.	.6	
9.	McBee Products	Office Systems	Athens, Ohio	.8	
10.	Union Carbide Nuclear Co.	AEC Plant	McCracken, Ky.	1.8	
11.	Abbott Laboratories	Pharmaceuticals	Lake, Ill.	3.6	
12.	Esso (Standard Oil)	Petroleum Refining	E. Baton Rouge, La.	4.0	
13.	Firestone Tire and Rubber	Tires, Tubes	Shelby, Tenn.	3.8	
14.	Dunn & McCarthy	Women's Shoes	Cayuga, N. Y.	.8	
15.	Ford Motor	Glass	Davidson, Tenn.	1.8	
16.	Universal Atlas Cement	Cement	Lake, Ind.	1.2	
17.	Bethlehem Steel	Steel Mill	Erie, N. Y.	15.0	
18.	Reynolds Metals	Aluminum Rods, etc.	Cook, Ill.	1.9	
19.	Haynes Stellite	Alloys	Howard, Ind.	3.0	
20.	Kohler Co.	Plumbing Fixtures	Sheboygan, Wis.	3.2	
21.	Hughes Tool Co.	Oil Drilling Equipment	Harris, Tex.	5.0	
22.	Motorola	Transistors	Maricopa, Ariz.	2.0	
23.	International Harvester	Heavy Trucks	Allen, Ind.	4.4	
24.	Cessna Aircraft	Aircraft	Sedgewick, Kan.	3.7	
25.	Murray Ohio Mfg.	Bicycles	Lawrence, Tenn.	.8	
26.	Ansco	Photo Films, etc.	Broome, N. Y.	4.0	
27.	Eagle Pencil	Pencils	Fairfield, Conn.	.5	

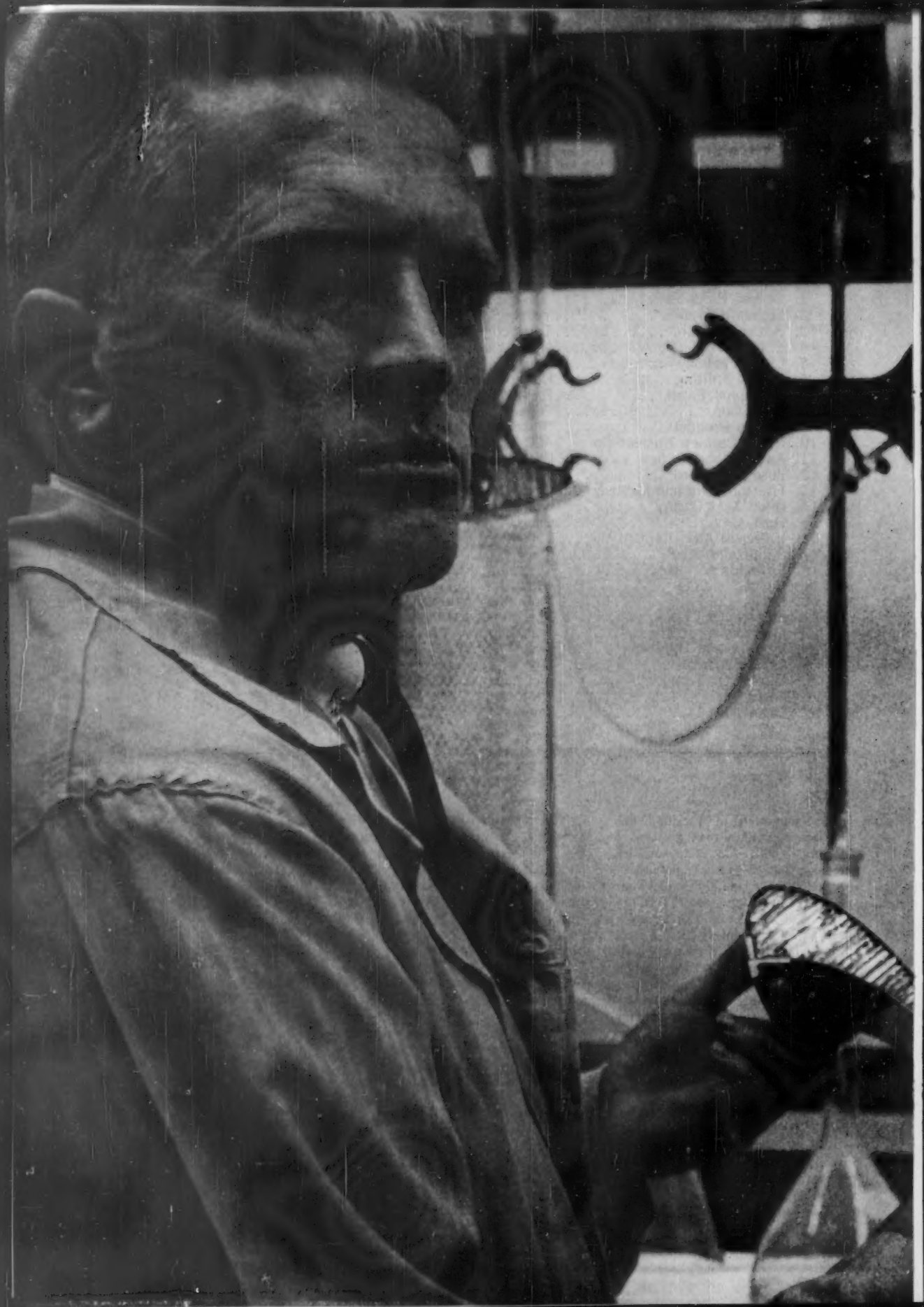
tail, as suggested by the fact that there are potentially over 400 industries, and 3,000 counties to consider. The fact that the basic data are on magnetic tapes suitable for high-speed computation does facilitate this kind of calculation. For example, many paper companies sell to a wide variety of industrial consumers with varied packaging problems. One large paper company solved its problem of calculating county potentials by renting our Univac tapes containing the 4-digit county detail, and summarizing the latter to a 3-digit level. This reduced the 450-odd 4-digit industry classes to 142 consolidated 3-digit industrial groupings. The company then proceeded to classify all its accounts according to the 3-digit SIC classification and to develop consumption ratios, which were applied to the area employment totals to produce county potentials.

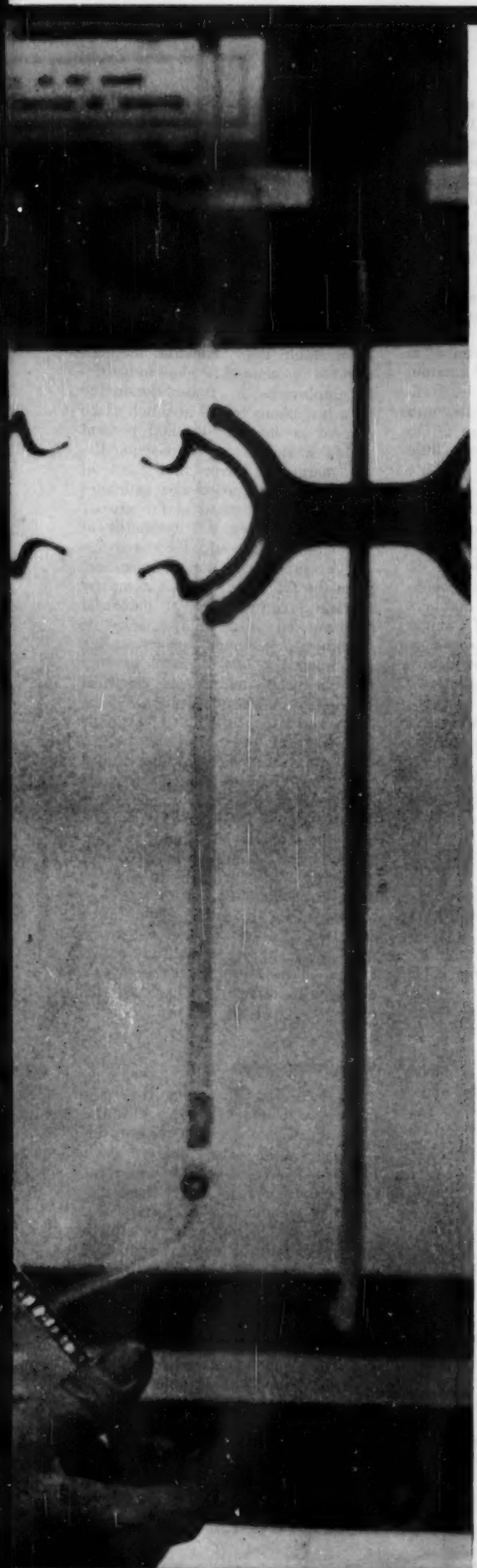
The development of consumption ratios for SIC industries is of course the key to successful industrial marketing. A large industrial supplier is often in a position to classify its customers by SIC and determine consumption ratios per employee based on actual past performance. A more objective set of ratios can be calculated on the basis of a survey (mail, telephone or personal interview) of plants within given SIC industrial classifications. Here the value of the results is directly proportional to the size of the sample of plants surveyed. In skilled hands, such surveys can yield invaluable information not only for the development of potentials but for product planning.

The use of surveys in industrial marketing can be fruitful because, unlike the marketing of consumer goods, the number of ultimate industrial consumers is limited. A relatively small number of industrial consumers within any industry often account for the bulk of sales volume. Hence the importance of pinpointing the precise location of industrial accounts.

Determination of SIC Codes

One very difficult problem is deciding what SIC 4-digit code to assign to given plants. In the case of multiple product plants, Census enumerators are supposed to decide according to the dominant product line, but it is often quite difficult to make such a determination, even for the plant manager. There is, however, a growing sophistication about SIC, since there is no alternative to the use of SIC to classify industries. For example, more and more Chambers of Commerce are employing SIC codes in their industrial development programs, and are compiling directories in accordance with the old SIC code. (It will take several





BASIC TEST FOR MEDIA SELECTION:

Ask anyone, anyone you're trying to sell in the aviation market, what publication he reads and respects most.

A powerful editorial force is a powerful selling force.

Aviation Week

Including **Space Technology**

A McGraw-Hill Publication. 330 West 42nd St., New York 36, N. Y.

Aviation's largest engineering-management audience.

ABC PAID CIRCULATION 71,950

years before a complete switch can be made to the new codes: this *Survey* will help facilitate that change.)

To illustrate the problem of SIC identification, we present in the box on page 15 another quiz on plant location of the type which proved quite successful in our 1958 issue. We have selected about 75 actual plant names from our files of 4-digit classifications. Each of the 20 two-digit industry breakdowns is represented in this list, and the employment estimate, state and county identification, and dominant product line are given for each plant. The reader is challenged to determine the 4-digit code (old basis) that applies to the particular plant.

Actually, there can be considerable argument in the case of some plants as to the appropriate SIC code. We have sometimes assigned a 4-digit code to some plants that were in variance with the codes assigned to these plants by the Census Bureau in 1954. Accordingly, we sometimes find that in our 4-digit rankings, the 20 counties selected as leading will account for 100% or more of all employment in that industry, even though there are many other plants in the industry as yet unaccounted for. This appears to be an unavoidable difficulty.

1958 Rankings vs. 1957

1958 was a recession year for most industries, and most rankings published here do not show significant gains in employment, but frequently heavy losses, as in the automotive industries. One notable exception, however, is in electronics, with particular gains for such counties as Santa Clara and San Mateo, California. Readers will accordingly note great changes in such industries as 3662 (electronic tubes), 3721 (aircraft) and 3729 (aircraft equipment and missiles). Indeed, the rapid developments call for further breakdowns in industry definition envisioned in the new SIC codes for these industries.

The industrial location patterns indicated by the rankings have not changed markedly, with the exceptions noted above caused by the growing emphasis on electronics and missiles in the Far Western states. But we must emphasize again that these patterns still represent a notable advance in our undertsanding of the dispersion of American industry. As we pointed out when we first introduced these tables last year, there are still no alternative rankings available anywhere else.

For lack of space we have had to omit the 2-digit rankings of the leading 100 counties from this issue, but we have expanded the degree of detail shown in our rankings of the leading 100 counties in the nonmanufacturing industries of mining, construction, and public utilities (see pages 138-146). We can, however, supply 2-digit manufacturing employment data to interested parties at nominal cost. The source of such data is indicated below.

The Census of Manufactures in 1947 and 1954 provided information on the number of plants in each 2-digit class in three size categories (employment under 20, from 20 to 99, and over 100), but very little data on actual employment outside the larger metropolitan areas. Working from this base, we have succeeded in assigning to each plant reported by the 1954 Census an average employment figure for 1958.

Since manufacturing is highly centralized, there are countless numbers of cases where the activity of a single county is accounted for by one firm or a pairs of firms, and consequently will not show in Census publications.

Our estimates of county employment for the 4-digit SIC industries were made on a similar basis, but here we were able to work from an original pool of Census data in which the size of plants was broken down into seven different groups rather than three, permiting a far higher order of accuracy in making our 4-digit county estimates of employment.

In the case of our 2-digit estimates our starting point was a tabulation of 1947 and 1954 Census of Manufactures data which showed, for each county in the United States, the number of plants in each of three different size-categories, for twenty industrial classifications. For each of these 180,000 "cells," our research staff prepared estimates of the average number of employes. These estimates were based on a series of studies, for each industrial group, of the variation in the size of plant. The results were checked against Census published data and refined with the use of employment and payroll data taken from Social Security tabulations, which in some aspects offer more detailed information than the Census. But the most fruitful source of county employment estimates have been chambers of commerce and postmasters, whom we poll annually for industrial data, and the various state employment commissions.

All the data developed at each stage of the inquiry have been transferred to IBM cards or to Univac tape and are consequently available for special industrial market analyses.

Industrial suppliers can use these county rankings for both 2-digit and 4-digit industries and the data on which they are based to establish sales quotas in precisely the same manner that the *Survey of Buying Power* tables for population, sales, and income are used for consumer marketing problems.

One note of caution must be sounded. Consumer markets are far more stable than industrial markets. It is not uncommon in some industries for employment in an area dominated by a few plants to fall as much as 50 percent or increase by 200 percent within a single year. Consequently, the margin of error that must of necessity be accorded our estimates of industrial potential is far greater than for our regional estimates of population, sales, and income.

The most common application, takes the following form. A company making a certain type of industrial lubricant, let us say, may analyze its customers and decide that its market is composed mainly of plants producing chemicals, machinery, electrical machinery and transportation equipment, and also plants in a few 4-digit industries in other 2-digit groups, such as metal office furniture, and paper coating and glazing. It may feel that each of those industries is equally important, and it will therefore request a county-by-county listing (covering all counties and therefore achieving 100% coverage) of employment in each industry, plus a county total for the industries. The latter may be expressed as a percentage of the industry total for the entire United States to indicate the overall relative importance of each of the counties.

Weighting Industries

As an added refinement, the company may decide to give each of the four industries a different weight, depending on its actual sale to each industry, in which case it will want each county total to reflect these differential weights for each industry.

We have in our files complete county listings of each 4-digit SIC industry, and will be glad to furnish such lists to subscribers at a nominal cost. Those equipped to handle the data by mechanical means may purchase either Univac tapes or IBM cards from us. In addition to the 4-digit material, which involves 300,000 separate county estimates of employment and plants, we also have on IBM cards other county data on employment and plants.



"I don't know who you are.

I don't know your company.

I don't know your company's product.

I don't know what your company stands for.

I don't know your company's customers.

I don't know your company's record.

I don't know your company's reputation.

Now—what was it you wanted to sell me?"

MORAL: Sales start before your salesman calls — with business publication advertising.

McGraw-Hill

PUBLICATIONS

How the Advertiser Can Use the SIC

By **RICHARD C. CHRISTIAN**, *Executive Vice President*,
and **RONALD F. MEADOWS**, *Manager of Research*,
Marsteller, Richard, Gebhardt and Reed, Inc.

SIC, by clearly defining specific markets, is useful to advertisers chiefly as an aid in determining budgets and selecting media. With his market sharply in focus, the advertiser can easily decide which media offer the best coverage—especially if the publishers break down their circulation by the SIC classifications.

A frequently heard lament of management is that marketing is not "scientific" enough. There appears to be an increasing desire for more statistical justification of market maneuvers or, simply, more facts on which to base sound marketing decisions.

A typical comment: "It is surprising to realize that the engineering skills which industry has exhibited in the creation and development of products, have not been applied to the marketing function to any real degree."

But let's talk about advertising in particular. Management is justifiably seeking ways to remove some of the guess work from decision making, such as the ideal size of the advertising budget, the kind of ad to run and where to run it. Ah yes, we would all like to have such insurance. But can advertising be reduced to a "science"? Many don't think so. A noted peer recently stated that this hope when applied to advertising was "vain, false, and unnecessary." . . . that advertising was not a science bu a practice *a la* the physician and the barrister.

It may now be well-nigh impossible to reduce advertising to one gigantic slide rule, but doesn't it appear that it's about time for the advertiser to attain a greater degree of sophistication than has been true in the past? All too often it seems advertisers run the race with leaden shoes by sticking with come-what-may approaches to the job. Decisions based on educated whim may sometimes be profitable to the gambler, but aren't they foolhardy in the light of what today's management has every right to expect?

Well, then how does one become an advertising sophisticate? One thing is sure—it's tough to become soundly based in the advertising approach if the entire marketing operation is not soundly based. But since the subject of this discussion is advertising, let's assume that all companies have well conceived marketing operations including such elements as a well organized sales force, integrated marketing-research responsibility, detailed sales records by SIC, etc. The mere fact that the Government provides bountiful statistics by SIC on employment, production, and value of shipment, should prompt industrial marketers to consider the use of this code system for their sales. The SIC system is a way to code sales; certainly it is the most positive industry-wide (448 industries) method. Given such tools the conscientious advertising man has a lot to work with.

SIC Use on Upgrade

How many companies are using the SIC code system? Well, no one really knows. However, the Marsteller-Rickard research department keeps up-to-date on the agency's clients selling to industry. We find that, while not an overwhelming number of our clients use the SIC, its use is definitely on the upgrade.

The most often-expressed reason for not using the SIC is that it is not applicable—either because the company is interested in a very limited number of markets, or because even the 4-digit SIC groups are not specialized enough to adequately code the markets in which the company sells. But sometimes this type of objection is more suspected than real—it's no trick to pull the SIC groups apart or put them together to suit one's own needs.

The most discouraging excuse for not using SIC runs something like this: "We have no need for SIC coding of sales records or for Government information . . . we know all our prospects and our industry well enough." Quite often, it takes but little investigation to prove the diehards wrong in cases such as this.

From surveys conducted among SIC users, SALES MANAGEMENT has learned that marketers use SIC primarily in seven ways—two of which involve advertising directly and the rest indirectly.

1. Determining sales potentials
2. Setting sales quotas
3. Aligning sales territories
4. Determining distributors' territories
5. Determining plant and warehouse locations
6. Allocating the advertising and promotion budget
7. Determining the advertising media

Delineations are fine, but the basic point to remember is that the *SIC aids the industrial marketer to know his markets.* This is significant because few industrial advertisers really know their markets well. The maker of baby food knows his market and a manufacturer of baseball bats has a pretty good idea of who will buy his baseball bats; but the maker of plastic moldings, let's say, has a tougher time of it.

Industrial markets, too, are quite unstable; employment in certain industries can vary much more widely than in consumer industries because of economic conditions, rapid technological advances, Government spending, etc. By helping out in the market-familiarity job, *the SIC helps the advertiser to talk more directly to the reader,* in a language he understands.

But the most important use of the SIC, from the advertiser's standpoint, is as an aid in budget determination and media selection.

By seeing the market clearly defined, the advertiser is better able to choose the media that best reach the market—providing that the publisher, also, has clearly defined his market, i.e., editorial objective and audience.

And what better way is there for a publisher to define his market accurately than by SIC? By providing

Your advertising in...

reaches the right people...

in the right places...

when they're READY TO BUY!

(with low-cost results you can measure)*

■ Your advertising in N.E.D. is the fastest, most economical way to search for *and find:* (1) new applications for your products (2) new buying influences (3) important new customers and (4) new industries not previously considered good markets for your products.

N.E.D. is the place industry's most active buying group look monthly for ideas on established, new or improved products and equipment to help them do their jobs better. They depend on N.E.D. for *all* the important product news in brief, easy-to-read form, under one cover.

N.E.D. helps you accomplish these important marketing objectives by reaching industry's most active buying group when they are Ready to Buy... and it reaches them for only ¼c per copy.

*Average number of inquiries per page has increased 42% since 1956 ... proof of N.E.D.'s amazing pulling power and growing acceptance.



balanced low-cost coverage of buying influences

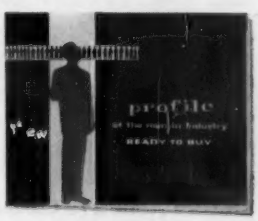
JOB FUNCTION	FUNCTIONS OF READERS				Total primary and secondary
	%	Primary	%	Secondary	
Production	20.6	15,659	25.4	28,768	44,427
Plant Operation & Maintenance	28.8	21,892	24.2	27,409	49,301
Engineering and Design	32.8	24,933	21.0	23,785	48,718
Purchasing	17.8	13,530	29.4	33,299	46,829
TOTALS	100%	76,014	100%	113,261	*189,275

Total distribution as of June, 1959

SIC Group	Industries	N.E.D. Copies	Total Plants Reached	Plants Rated Over $200,000
33	Primary Metal Industries	6,453	3,073	2,081
34	Fabricated Metal Products	10,278	7,144	3,795
35	Machinery (except Electrical)	13,776	7,739	4,278
36	Electrical Machinery	8,238	3,387	2,270
37	Transportation Equipment	5,463	2,052	1,469
38	Professional & Scient. Instru., etc.	2,254	1,016	619
19	Ordnance	357	110	100
	Metalworking Total	46,819	24,521	14,612
20	Food & Kindred Products	2,985	2,077	1,936
21	Tobacco Manufacturers	127	63	62
22	Textile Mill Products	2,651	1,870	1,728
23	Apparel	567	438	389
24	Lumber & Wood Products (except Furniture)	1,459	1,213	814
25	Furniture and Fixtures	1,563	1,187	757
26	Paper & Allied Products	2,587	1,471	1,247
27	Printing & Publishing	600	443	367
28	Chemicals & Allied Products	5,132	2,731	2,308
29	Products of Petroleum & Coal	1,038	471	442
30	Rubber Products	1,602	857	581
31	Leather Products	863	678	513
32	Stone, Clay & Glass Products	2,906	1,863	1,437
39	Miscellaneous Industries	1,687	1,199	673
	Manufacturing Total	72,586	41,082	27,866
40-48	Transportation	798	513	508
10-14	Mining	1,176	914	686
49	Utilities & Sanitary Services	1,100	673	666
15-17	Contract Construction	176	119	105
50	Wholesale Trade (other than Merchant)	40	37	33
	Government & Educational	164	124	
	Total Controlled Distribution	76,014	43,462	29,864
	Advertisers, Agencies & Prospects	5,986		
	Grand Total	82,000	43,462	29,864

*average 2.49 job functions per reader

New editorial study and data file



An up-to-the-minute picture of industry's most active buying group. Tells what types of industrial publications they read and how they use them... what kind of advertising they like, and what they don't like. Helpful information for all industrial advertisers including the latest data on N.E.D. market coverage, readership, and advertising results. Send for your copy.

A PENTON Publication • Penton Building

Cleveland 13, Ohio • F. O. Rice, Publisher

NEW EQUIPMENT DIGEST

NEP

BPA

such information, a publisher does the advertiser a real service which in the long run can only make the advertiser a *better* advertiser. Fortunately for the advertiser, more and more publishers are providing SIC circulation breakdowns. The metalworking industry in particular has a wealth of SIC circulation information available. And now certain other publishers, who in the past have passively resisted providing such data to advertisers, are falling in line. The reason: sophisticated advertising buyers want it.

In practice, the advertiser can use publishers' SIC data only in the first stage of media selection—circulation comparisons. Ideally, the advertising buyer would also consider the two other dimensions in media analysis—the editorial quality of the publication and the image of the publication in the minds of its readers—because the advertiser wants readers, not merely recipients. However, circulation is the most important consideration; if a book is not received by the right people, its editorial quality and its readership are of only academic interest.

So let's discuss SIC data and how they can best be used by the advertiser fortunate enough to possess company sales information that has been coded by SIC.

1. The most direct way to use SIC data would be to obtain a list of all individuals with a desired title or job function in the proper SIC groups and then direct-mail them. Such SIC lists can be made available, depending on the industry.

2. The next most direct way to reach prospects would be to advertise in publications providing SIC circulation data. The books that best duplicate the advertiser's list are put on the media schedule.

3. Next, the advertiser probably would consider the audited publications with resonably well defined markets.

4. Least desirable from the directness point of view (and any other point of view for that matter) would be the unaudited publication with the ill defined audience.

Radical Adhesive Corporation

The Radical Adhesive Corporation is a highly successful (and hypothetical) manufacturer of a wide variety of industrial adhesives and bonding agents. The company's operation has been a profitable one for a number of reasons, including: a good and salable product line; a top-notch marketing staff; good distributor relations; adequate sales control; and well directed, effective advertising. For our purposes, let's concentrate on Radical's sales records and how they are used by the advertising department.

Adhesives will bond almost any material you can name—aluminum, steel, brass, magnesium, copper, in addition to rubber, leather, plastic, glass and others. Accordingly, Radical sells to a wide range of industries or markets. To simplify the job, Radical maintains accurate sales records, directly classified, where possible, by 4-digit SIC code number. Where it was found that the given SIC codes were not exact enough, the Radical marketing staff "took apart" the particular 4-digit code to suit its own purposes. However, the 4-digit number was kept as the base on which to compare Government and industry figures.

In addition to its own internal sales records, the Radical marketing research department took advantage of every available pertinent Government and industry statistic. The department conducted periodic market studies to keep abreast of market needs and trends, and Radical's share-of-market by industry. Hence, sales and advertising management was constantly kept informed of company strengths and weaknesses in the various markets. Based upon this data and the general economic conditions, the researchers were also able to prepare highly accurate sales forecasts. In a word, the research department paid its way.

Let's take a closer look at how the SIC system fits into the Radical Adhesive Corporation's marketing—and advertising—program. It might be well to mention that the SIC is not a panacea or a substitute for common sense; it can only do so much. Among the tasks it will *not* perform are selecting markets or industries to which a company should market, and showing the relative importance of each of these markets to the company. But SIC information runs with the ball from this point, providing data *within industry boundaries*.

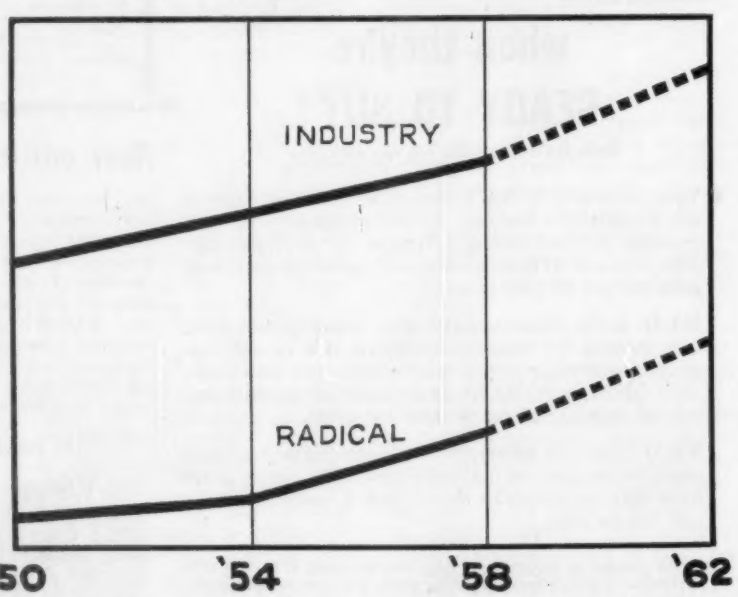
Based upon the aforementioned marketing studies, Radical had a pretty good picture of each market and its relative importance, which, when put together, provided the total company sales profile. Total industry sales for those SIC groups sold by Radical and Radical's total sales over a period of years were charted and compared. (See chart below).

Setting the Budget

There are two common methods for formulating the advertising budget —by percent of sales and by task or objective. Industrial marketers generally use the latter and Radical is no exception.

Back in 1950, management noted that Radical was getting only about 8% of the market, which was a good deal less than desirable. Hence, an arbitrary objective of a 20% market share was agreed upon. Advertising was assigned its particular job—to establish overall awareness and rec-

Sales of Adhesives—All SIC Groups



Sales by SIC Groups Sold by Radical and Radical's Own Sales Were Compared





THESE ADS

announcing model homes in two Long Island housing developments—Hewlett Park and Country Estates—were published in The New York Times. Both new models, in different communities, were opened at the same time with advertisements placed by Preiss and Brown Advertising.

PRODUCED THESE RESULTS

"At Hewlett Park, only two 800-line ads were needed to put sales so far ahead that the remainder of the schedule was cancelled," says Alvin Preiss. At Country Estates, with its $47,900 homes, "people had to wait on line for hours and many were turned away... sales the first day for a home in this price category were fantastic." Here's another example why today, as always, it pays to advertise

IN THE NEW YORK TIMES

first in advertising in the world's first market

The Marketing Team at Wallace Talks to Chilton

"Trade magazines carry the sales and

Wallace Silversmiths has been a guild manufacturer of fine silverware for a century and a quarter. Today the Wallace name appears on a complete line of silver and stainless steel flatware and holloware, plus a recently added line of fireplace furnishings and other related housewares. The highly successful sales program of this progressive and expanding company is the product of its well-organized and active marketing team. We recently talked firsthand with five members of this group: J. H. Asthalter, Vice President—Marketing; John F. Banks, Sales Manager—Retail Division; William S. Hammersley, Sales Manager—Wholesale Division; Henry S. Allen, Jr., Sales Manager—Puritan Fireplace Furnishing Division; and Craig A. Bossi, Advertising and Sales Promotion Manager.

We asked these gentlemen to comment on the role and importance of the trade press in the accomplishments at Wallace. Their replies were both interesting and rewarding. Here are highlights of what was said . . .



Craig A. Bossi • William S. Hammersley • J. H. Asthalter • John F. Banks • Henry S. Allen, Jr.



Mr. Asthalter says, "We know from experience that one of the best ways to reach our ever-broadening group of customers and prospective customers—regularly and effectively—is through the medium of the trade press. And as we diversify and expand product lines, it becomes increasingly important to do so. In addition, where salesmen are sometimes unable to penetrate beyond the purchasing level of an organization, trade magazines carry the sales and corporate story right to the top echelons."

corporate story right to the top echelons"



Mr. Banks says, "The trade press is an all-important link between a manufacturing organization and its customers. Once a book has built acceptance, it is in an excellent position to compete for time—a man can't hope to read everything, but he can't fail to read the manual of the industry. The people we deal with rely heavily on their trade magazines for news and information about the industry. Therefore, through our trade advertisements, we are able to get the Wallace story over to those we want to reach, at the right time and under the most favorable conditions."

Mr. Hammersley says, "In our end of the business, we work with a huge dealer organization. It is important that these people know at all times what we at Wallace are doing to help them sell our products, the lines to be featured in national advertising, the patterns, the prices, the display and promotion material available to them. We rely on our trade advertisements to carry this message. We have found this the best and most economical way to get the job done."

Mr. Allen says, "The coverage and effectiveness of trade paper advertising was most convincingly demonstrated when we recently undertook to establish the Puritan line of fireplace furnishings as a Wallace property. We relied upon advertising to help develop new markets and to build a new dealer organization. Results were excellent, and the cost of the undertaking well within reason."

Mr. Bossi says, "A trade publication builds and retains its readership because of its informative and educational value to the individual. It follows, therefore, that our advertising messages, scheduled in a well-established and accepted trade magazine, are enhanced by the prestige of the book itself. And not only does the trade press help us communicate with customers, it helps us reach a group far less accessible—new prospects and key people engaged in other phases of the jewelry industry."

Trade and industrial publications serve an area unduplicated by any other selling force. They make it possible for you to talk with customers and prospects on common ground—at a time when they are seeking information and are most receptive to your message.

Chilton is one of the most diversified publishers of trade and industrial magazines in the country—a company with the experience, resources and research facilities to make each of 17 publications outstanding. Each covers its field with the dual aim of editorial excellence and quality-controlled circulation. The result is confidence on the part of readers and advertisers alike. And confidence is a measure of selling power.

Chilton COMPANY
Chestnut and 56th Streets
Philadelphia 39, Pennsylvania

Publisher of: Department Store Economist • The Iron Age • Hardware Age • The Spectator • Automotive Industries • Boot and Shoe Recorder • Gas Commercial Car Journal • Butane-Propane News • Electronic Industries • Jewelers' Circular-Keystone • Optical Journal & Review of Optometry • Motor Age Hardware World • Aircraft and Missiles Manufacturing • Distribution Age • Product Design & Development • Business, Technical and Educational Books

People
are everywhere
and all
of us people
behave
like customers
when we buy
topping
and
toys,
tractors
or trains...
so,
advertising must
be conceived
and written
for people.
There's an art
to "knowing"
people
and
how to move them
toward your product...

EMIL J. DE DONATO, INC.

299 MADISON AVENUE, N.Y.C. 17

ADVERTISING

MARKETING · MERCHANDISING

FILM PRODUCTION

SPECIAL PROMOTIONS

We think,
create and produce
advertising
to be read
by people.

Please write...
get to know more
about our people!

ognition of the company as a large but versatile supplier of all kinds of industrial adhesives. Management understood and believed in industrial advertising . . . enough to provide adequate budgets to do the job. The result of the company's efforts: Radical sold 21% of the industry in 1958 and realistically hopes to increase that share in the years ahead.

The total budget was segmented by industry—each industry served by Radical. The size of the expenditure allocated to each market was determined by a number of factors, such as sales objectives, current sales, competition, and industry conditions.

One of the easiest ways to attach weights to markets is to relate the total employment for an SIC group to industry and company sales for that group. This weight is then compared to that of another SIC group, with the result being a fairly clear picture of where a company stands in smaller or larger industries. But, of course, these weights are but one factor.

The use of adhesives in the metalworking industry is growing rapidly, now standing side by side with mechanical and fusion methods of joining various metals. And the future looks even brighter, so Radical's advertising department took cognizance of this fact and devoted a large slice of the budget to metalworking.

There are 185 four-digit classifications in metalworking and there is a potential market for adhesives in a great many of them. SIC 3721, Aircraft or Airframe Manufacturing, is one of the largest potential sources. This group employs about 536,000 workers in 72 plants, as estimated by SALES MANAGEMENT. And interestingly enough, about 98% of the employment is in 49 counties.

Because of the great growth in the aircraft and missile field, Radical decided to exert an all-out effort to gain a foothold in the industry represented by SIC 3721—a foothold which statistics, such as those below, showed the company did not have. Note Radical's share-of-market in this field as compared to its share-of-market in SIC 2443, Veneer and Plywood Containers, a field pioneered by Radical.

Media Selection

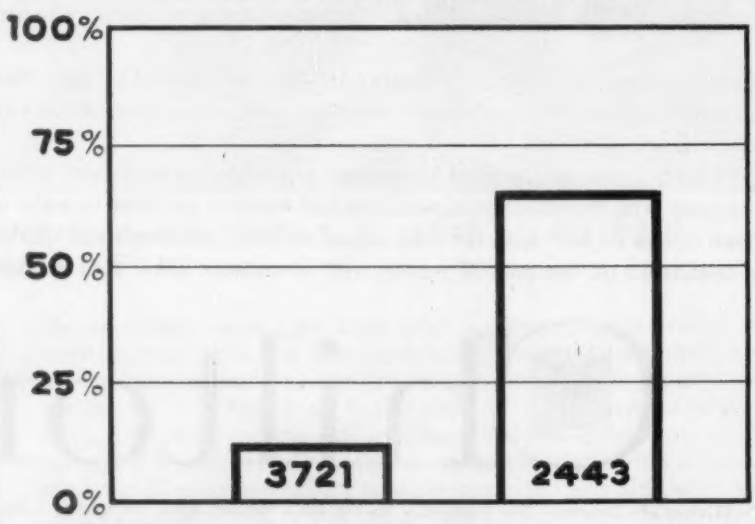
The SIC can be the most important tool in industrial media selection because it aids in determining which publications serve which prospects.

Hence, the circulation/prospect matching job—to determine the publications with circulation in SIC 3721. It's a simple task when the publications supply such circulation information, which in our hypothetical case, they did. Publication A showed 3,435, B 6,011, C 520, D 16,530, E 5,424, and F 17,351.

It's obvious that publications D and F offer the greatest number of recipients in the airframe field. Radical, noting these circulation statistics in addition to the other qualitative factors, decided to launch a full schedule in the two leading publications.

The SIC aids in helping the marketer to know his markets better, to pinpoint strengths and weaknesses, and then take action. Advertisers and publishers alike might have a lot to gain by adopting the SIC code system—the "Radical" method, if you will.

Radical's Per Cent Share of Market



The Comparison Spurred Move to Gain Foothold in SIC Industry 3721

Why does this advertiser



APPRAISAL ENGINEERS

MARSHALL and STEVENS
Incorporated

610 SOUTH BROADWAY • LOS ANGELES 14, CALIFORNIA • MICHIGAN 3681

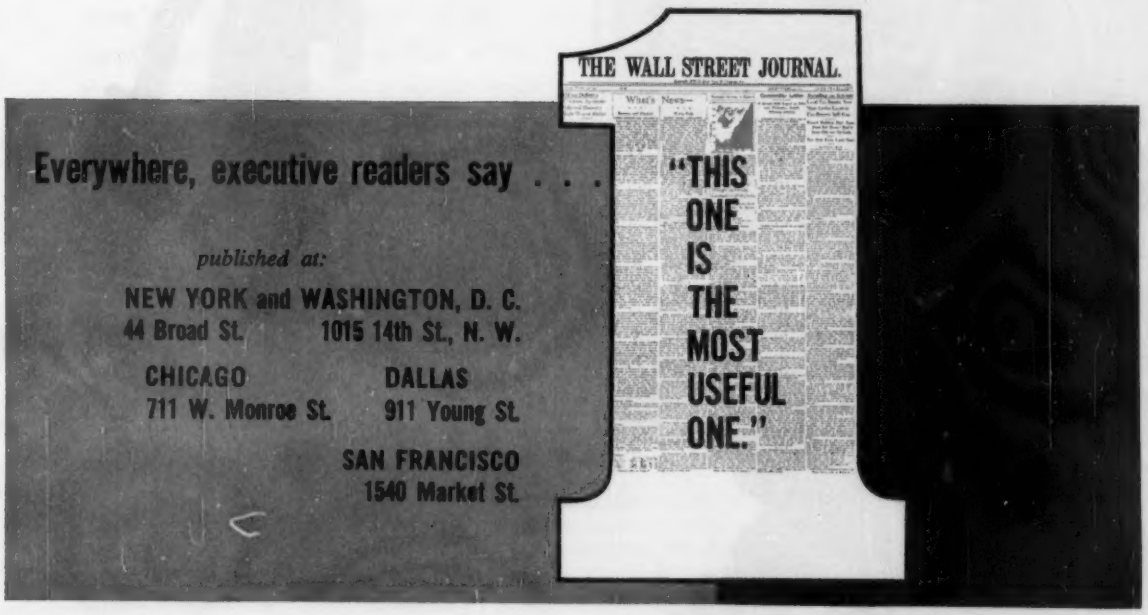
Mr. Robert C. Day
Wall Street Journal
2999 West 6th Street
Los Angeles, California

Dear Mr. Day:

think THE WALL STREET JOURNAL is "THE MOST USEFUL ONE"?

"This new schedule represents an 80% increase in space over our past year's schedule in your publication. This increase is prompted by results! *Greatest number of inquiries, lowest cost per inquiry, quality of inquiry, actual new clients from Wall Street Journal inquiries,* certainly demand a vote of confidence. We're happy to cast our vote of confidence with an increase of advertising in The Wall Street Journal."

Earl P Marshall
President





WHEN THE BOSS

TRAVELED A BEAT,

THINGS

WERE DIFFERENT



The Good Old Days always sound great in mellow retrospect. Actually the going was "pretty rough"...one night stands; hot, jerky trains; not-so-hot hotels; eat-and-run schedules. Yet the Boss will tell you there was a lot of sales-satisfaction in the job.

He made a lot more calls, had a chance to do a better selling job than the salesman who calls on today's lumber and building material dealer. Mr. Dealer was able to see him; to spend time with him; to listen and to learn.

Not so today! Those leisurely days are gone. Blame it on progress. Blame it on America's amazing growth—as reflected in the amazing growth of Mr. Dealer. But the situation exists. And the smart manufacturer faces up to it.

That same lumber and building material dealer today handles *many more* product categories than he did even five years ago. What's more, there are many more manufacturers in each of the *old* categories—all training their sales artillery on him.

Three times as many salesmen call on this dealer.

He has more people and more problems on his mind. His scope of operation is much bigger. So it all adds up to this: he has *less time* to give *more salesmen.*

The remedy? Retool your advertising to the dealer! Tell the dealer *in print* what your salesman would like to tell him *in person.* Make your advertising to the dealer what it should be—and must be: salesmanship-in-print. That's what sales-smart manufacturers are doing today.

And where are they doing it? In the publication this dealer looks to and lives by: BUILDING SUPPLY NEWS. It reaches *more* dealer establishments, knows them better, serves them better. Small wonder it is picked by *more* advertisers, carries *more* advertising, than any other magazine reaching dealers. And at lowest cost!



BUILDING SUPPLY NEWS

One of America's Great Merchandising Publications

Published at Building Industry Headquarters, home of PRACTICAL BUILDER *and other leading building industry magazines. Other offices in Cleveland, New York, Miami, San Francisco, Portland and Los Angeles.*

©Industrial Publications Inc., 5 South Wabash Avenue, Chicago 3, Illinois

20 Points to Check When You Select a Plant Location

This list was developed by Cleaver-Brooks Co., Milwaukee. In the right-hand column are brief comments from Fred W. Hainer, executive vice president, and Harold Holtz, general sales manager, relating various criteria to the marketing operation.

1. Proximity to major markets	Holtz: "Our boiler market is tied in with large cities and large population centers. Here you find factories, office buildings, churches, apartment houses, hospitals, schools, and institutional buildings which are natural markets for our products. Our plants, while not necessarily to be located inside big cities, should be close to them to allow us to take advantage of this sales potential." Hainer: "The equipment we manufacture is heavy, weighing anywhere from 1,000 to 50,000 pounds. It represents a major moving problem. The freight bill can sometimes make or break the order. Any savings on freight enhance our competitive position."
2. Proximity to population centers	
3. Competitive wage structure	Holtz: "The sales force is constantly stressing the high quality of our boilers. To maintain that quality and still be competitive, we must be competitive on the wage side. Quality can be affected by wage structure, and, if adversely, this ultimately shows up in sales."
4. Pleasant living facilities with good schools and recreational areas	Hainer: "A well made product comes from contented people with good habits, who live in a community with a good psychological climate. Factors that make for good home life therefore help us to produce a better product. This has a salutary effect, too, on how our product is sold."
5. Adequate law enforcement	
6. Good churches, with a church-going populace	
7. Stable labor supply	Hainer: "This is basic to manufacturing and to the performance of the products we sell. Product acceptance depends on quality control and quality control can be achieved only with stable and skilled labor. Cities with industries requiring skilled labor naturally attract a supply of skilled labor. They've proved to be the best for us. The word 'stable' is all-important; it has a great bearing on successful employe-employer relationships."
8. Labor supply capable of being trained in skilled trades	
9. Non-discriminatory tax structure	Hainer: "Tax structure obviously affects the end cost of the product. To have taxes weigh against you is a distinct disadvantage in the competitive field of today."

Products and People at Cleaver-Brooks

Cleaver-Brooks Co., Milwaukee, originator of the packaged boiler concept, thinks fully as much about sales problems as it does about production facilities when selecting plant sites for expansion.

The firm's 1958 sales volume ran between $14 and $15 million. It manufactures water tube boilers and packaged fire tube boilers. It has a wholly-owned subsidiary, Cleaver-Brooks Special Products, which produces sea water desalting equipment.

C-B has sales representatives in every state in the U.S.A., every province in Canada, and throughout other countries in the Western Hemisphere.

The company is now in the fourth phase of an overall expansion program which includes:

Acquisition of a plant in Waukesha, Wis., less than 20 miles from the

10. Good transportation facilities, particularly truck and rail lines

Holtz: "Need for fast delivery is related to the stage in construction, adverse temperatures or other emergency conditions. Split-second timing on delivery is materially aided by good transport facilities. In some cases we have been able to obtain orders on fast delivery alone. Sometimes a customer will pick up his own boiler if he is close enough—so great is the demand for speed in filling the order."

Hainer: "Today our packaged boilers are 'bought off the shelf' and our customers want fast delivery. They need them and they have the funds; therefore they place increased demands on us for service. Quick transportation of parts is also important for repair sales. These parts can be shipped via airlines in an emergency."

11. Access to or availability of raw materials

Hainer: "This is important to the factory's ability to produce according to immediate demands of customers. It is also important in holding down inventories to achieve cost savings."

12. Availability of land to build and expand

Hainer: "Most firms picking sites today keep the expansion factor uppermost in their minds. Fewer and fewer adequate areas capable of accommodating extensive expansion are available. To sacrifice area for expansion to meet today's demands may prove particularly costly tomorrow. This is one of the reasons for the growing popularity of fringe areas for plant locations."

13. Civic pride in the community

Holtz: "No member of the organization, whether he works in the shop, the office, or on the road as a salesman, can do his best if he must apologize for his home surroundings. This shows up in the quality of our product, in our service, and in the job done by our salesmen. This matter of quality is all-important to us. We are convinced that any employe who is proud of the community in which he lives does a better job on the production lines."

14. Enterprising press and radio

Hainer: "A press and radio that are alert help to keep the community on its toes. They tend to help keep industry and industry's people on their toes. At the same time, they reflect the industry in a favorable light to the people of the community. These people, in turn, become a sort of volunteer sales force for your product."

15. Local Governmental support of and interest in new business
16. Sympathetic public awareness of business problems
17. Cooperative attitude on the part of established businessmen in the area

Hainer: "Some good indicators: purchase of locally-made products for public projects. Is the Chamber of Commerce active, aggressive, really interested in industry's problems, or is it just a social club? Are local businessmen working together willingly or pulling in opposite directions? Answers to such questions go a long way toward determining the advisability of buying or building in a given situation."

18. Good public utilities for plant site area
19. Presence of adequate services to complement the new plant

Hainer: "Often taken for granted, but subject to careful check because they are indispensable for efficient manufacturing."

20. Aura of quiet confidence in the future

Hainer: "This is perhaps the most intangible and difficult point to clarify. Perhaps it is best judged by the faces you see on the streets, the response to community betterment projects, the types of local stories you read in the newspaper and hear over the radio. It is the sum total of the other 19 points in our formula for site selection."

company's headquarters in Milwaukee.

Establishment of an eastern manufacturing center in Lebanon, Pa. These facilities have just been doubled.

Establishment of a new plant in Stratford, Ontario, Can., to improve service to the fast-growing Canadian market.

Purchase of a water-tube manufacturing business in Springfield, Ill.

President John C. Cleaver has been responsible for the development of most of C-B's products. He's a graduate of The University of Chicago. He owned and operated J. C. Cleaver Co., Oregon, Ill., before he co-organized Cleaver-Brooks in 1931. He served as vice president and treasurer until 1943 when he took over the presidency.

Fred W. Hainer, executive vice president, graduated in engineering from the University of Wisconsin. Before joining C-B he was supervisor of gas properties for Wisconsin Power & Light Co. He was appointed vice president in 1945, became a director and general sales manager in 1947, executive vice president in 1953.

Harold F. Holtz, general sales manager, joined the firm in 1946 as marketing manager. He is a graduate of Carroll College, Waukesha, Wis. ◆

Successful Introduction of New Industrial Products

By JOHN H. NEWITT
Director of Marketing, General Communication Co.

From a Radical New Product—His Greatest Challenge

John H. Newitt looks like the brightest student in a Dale Carnegie class. In point of fact he might easily be the brightest student in anybody's class. But his field is a highly abstruse one. He's a technical-product marketing specialist who is director of marketing for General Communication Co., Boston. His forte is his ability to communicate highly technical information about complicated products and processes. Among the radically new technical innovations he's introduced are a basically new type of hydraulic pump, a new metallurgical process being used by the aircraft industry and a complete product line of digital computer components. He's also rejuvenated two concerns with poor market position. He holds a B.S. in Electrical Engineering, took graduate studies in management while working for a development engineer. He is 41, married and has two children.



Today's industrial market belongs to the new product. Because of the constantly accelerating pressure for the development of new products, the manufacturer who relies solely on established products, and gives little thought to the creation of new products, is doomed to extinction. In fact, many technical concerns now derive at least half of their income from products that were not in existence five to ten years back. Some authorities predict that within the next ten years, companies without well-organized product programs are not likely to be around, except perhaps in some form of contract or service activity. It is not a question of whether or not to invest in new products, but of what kinds of new products to encourage and how best to develop them.

For every new product there is a unique marketing situation in which past history serves only as a point of

Continued on Page 35

SIC in the Introduction of New Products

SIC data will usually turn up many previously unknown areas of application for the product and can be used both for the final analysis and to provide new areas for mail and interview surveys. Such data can be helpful for the following purposes:

1. **To develop a prospect list for interviews, surveys, and direct sales:** The SIC can be used as a basis for compiling a master list of prospects. This may be supplemented by a variety of sources, including past company records, special industrial reports, directory listings, replies to publicity releases, magazine-subscription lists, and standard mailing lists. There will, of course, be much duplication. It is therefore advisable to refine and categorize all the data according to SIC classifications.

2. **To discover new areas of product interest:** To develop your list of prospects further, it is advisable to have one or more experts in the technological field of the new product go through the SIC manual and list all the categories he thinks might provide a market for your product. Sample investigations in these areas can easily show whether any market potential exists, or whether a more detailed breakdown within the category is called for. Additional markets may be found by studying the list of prospects for those companies with more than one plant. For example, when it is known that all the plants of a multiplant company are prospects, it is possible, by noting the SIC categories. Investigation of these new plants may show up new potential markets.

3. **To indicate the sales picture:** By the careful listing of total potential according to the SIC breakdown, it is possible to rearrange the data to get a picture of the geographical concentration of interest. You can then determine where it would be best to use sales reps and where a direct company staff would be feasible. The cost of sales calls can be computed from this data. This information compared with the present sales organization, could be used to indicate where territories should be combined and where other modifications might be made.

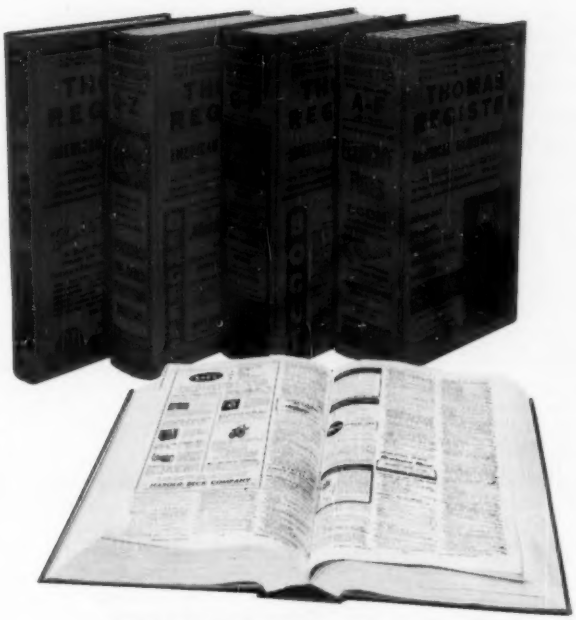
4. **To select advertising media:** By comparing the master-list breakdown with magazine circulation lists and other media lists, which are broken down by the SIC method, it is possible to determine where to get the best coverage per dollar of advertising. A word of caution is in order here, however, since a given media can sometimes present its circulation breakdown in a number of alternative ways. One should, therefore, make sure that the breakdown, as presented, accurately represents the market you're interested in. For example, of two magazines serving a given SIC industry, one may cater primarily to the engineering groups in the industry, while the other, with essentially the same SIC breakdown, may

Continued on page 35

INDUSTRY'S

NO. 1

PUBLICATION



THOMAS REGISTER

Industry's No. 1 Publication
because its
Industry's No. 1 Marketplace

THOMAS PUBLISHING COMPANY
461 EIGHTH AVENUE • NEW YORK 1, N. Y.
Telephone OXford 5-0500

NO. 1
In Sales Action For Advertisers

TR's leadership in producing Buying Action Inquiries out of all proportion to the low cost of display space is well known by experienced advertisers and agencies. Proof on request.

NO. 1
In Number Of Advertisers

12,265 manufacturers now advertise more than 45,000 products in TR . . . more than in any other 50 industrial publications combined.

NO. 1
In Gaining User Acceptance

Users know that all qualified makers have their products Registered and described in TR. Makers not in TR are out of the running when buyers start pre-purchase investigation in TR.

NO. 1
In Paid Circulation Income

Users pay more in subscription money to have TR than they pay to any other industrial publication . . . without special deals or offers.

NO. 1
In Long Life Of Advertising

Each edition of TR is used an average of 3 years . . . passed interplant, to branch plants, etc., . . . delivering the broadest possible coverage of all departments involved in product selection.

NO. 1
In Annual Advertising Billings

Advertisers invest more money in Thomas Register than in any other industrial publication per year . . . including weekly magazines.

NO. 2
In Paid (ABC) Circulation Increase

Since 1945 TR has doubled its annual distribution . . . sold out, with a waiting list for the next edition. Only one A.B.C. industrial publication (a weekly) has exceeded this record.

DO YOU FACE ANY OF THESE PRODUCT PROMOTION PROBLEMS THIS YEAR?

1. To find new markets...

Industrial Equipment News will take your product story to the largest plants in all manufacturing industries, many now developing NEW products, resulting in NEW markets for you.

2. To find markets now active...

With its ALL-industry coverage, Industrial Equipment News will insure that your product story reaches your present markets now active.

3. To increase coverage and response from the same or fewer ad dollars...

Industrial Equipment News will add 70,000 product selectors in the 40,000 top establishments who are looking for products like yours... when they are looking... resulting in IENquiries specifying kind, degree and immediacy of interest ... all for only $165 to $175 a month... a per thousand rate up only 4 cents in 25 years and down 18 cents since 1955.

Details? Write for
IEN's NEW "IEN PLAN"
and
NEW MEDIA DATA FILE FOLDER

YOUR MARKETS ARE CHANGING!



PRODUCT INFORMATION HEADQUARTERS

search out new markets ... intensify coverage of present markets... both at a cost of only $185 to $195 a month through

Industrial Equipment News...

originator of product news publishing in 1933 . . . continuing leader of its field . . . reaching 70,000 plus product selectors in the largest, most active plants in all industries . . .

CIRCULATION

Net controlled Dec. 1958: 73,003; total 80,131. *Plant Coverage* 40,092 largest, most active in *ALL* industries • 60.5% rated a million and over • 85.9% rated $100,000 and over.

Individuals Reached . . . 33.05% Production and Plant Operating Officials • 41.73% Engineers • 12.70% Administrative Officials • 8.08% Purchasing Officials • Plus selected coverage of government and military manufacturing and buying agencies.

Circulation Base . . . The incomparable list-building and maintenance facilities of our affiliate THOMAS REGISTER OF AMERICAN MANUFACTURERS.

EDITORIAL SERVICE

WHAT'S NEW in equipment, parts and materials . . . a subject continuously of major interest to *all* product specifiers and buyers in *all* industries. Industrial Equipment News' product descriptions are technically accurate and factually complete as compared with mere product announcements.

READERSHIP

Industrial Equipment News is read for only one reason . . . *product information* . . . current readership verification thereby indicates 97.5% of readers use the publication for buying reference.

ADVERTISING

Only $185 to $195 a month for standard one-ninth-page advertisements . . . to place factual descriptions of your products before industry's largest specifiers and buyers . . . *where* and *when* they are *LOOKING FOR* their current product needs.

PROOF OF VALUE

More advertisers (over 750 per issue) are using Industrial Equipment News (IEN) than use any other trade or business publication. Industrial Equipment News provides proof of delivering all the usual values of advertising *PLUS* traceable quality inquiry response in the form of both general and (exclusive) *specific information* inquiries.

DETAILS

Ask for . . . the IEN PLAN . . . and for our complete MEDIA DATA FILE or contact our representative nearest you as listed in the adjoining column.

Industrial Equipment News — **IEN**
Thomas Publishing Company

BPA NBP
461 Eighth Avenue, New York 1, N. Y.
. . . Affiliated with Thomas Register

departure. Today the marketing manager plays an increasingly important role. He is concerned, first of all, with a continually changing market in which no two sets of conditions are ever the same. Not only must he be able to determine the market as it exists today, but he must be able to predict the probable course of the developing market for new products.

To capitalize on a new industrial product, it is essential to be able to determine its market potential. Since so much time elapses between the conception of the product idea and its commercial realization, this is not an easy undertaking. But it is a possible one. There is an abundance of available data. There are many proved methods of gathering information. By systematically collecting and evaluating all the pertinent facts about today's market, the marketing manager can predict where, in what quantity, and how best to sell any new product. Determining the potential market early and setting up sales policies based on the market analysis can easily mean the difference between dominating an embryo market and merely participating in it.

What is needed is a qualified group to undertake the market survey, and an efficient communication system between market and company to ensure that pertinent information gets to the right departments at the right time.

Failure to ascertain the qualifications of the survey group is a frequent cause of failure among new technical products, especially among smaller concerns, relatively inexperienced in marketing activities. The members of the survey group must be trained both in market research and in the technology involved. Such a group may be difficult to obtain for some classes of technical products, but is essential to a valid analysis.

It is also necessary to make sure that the survey group is experienced in dealing with new-product studies. Since the various phases of marketing are as different as one product from another an outstanding reputation in one field is no assurance of competence in another. What may be right in one market may be dead wrong in another. A group experienced in researching markets for established products, for example, may easily err in blindly applying established methods to new-product studies. It is far more important to select a survey group on the basis of its ability in the specific field involved than to choose it by its general reputation. A qualified survey group has also a much better chance of predicting the type of sudden technical breakthrough that can play havoc with the best new-product programs.

Beyond the initial marketing investigation, it is essential that continuing investigation be maintained so that development of marketing practices will be kept up to date with the dynamic technical market. Although such a program is an individual thing, one following general framework suggests lines of communication basic to any successful market interpretation:

1. Be sure that the communication lines extend from *within* the company to the market and back to the proper place within the company, forming a kind of loop. This should be designed to avoid the possibility of unilateral decision.

2. Be sure that the information passing through the communication lines is correct and clearly defined. Check to prevent misunderstanding and to insure that the proper information is conveyed to the right sources in plenty of time to permit considered action.

3. Be sure that extraneous information does not clutter up the system or otherwise bog down the operation. This means eliminating all unnecessary procedures and paperwork. Unnecessary information should be sought out and disposed of regularly.

---

cater to the management or purchasing groups in the industry. You should, therefore, know more about the media than the SIC classification. In addition, it is important to determine where the buying decisions are actually made in the various concerns; in some companies, buying decisions are made in the engineering department while in others, buying is solely the responsibility of purchasing. In some concerns, too, responsibility is split, depending on the item or service involved. A good survey will go far toward ferreting out such information.

5. **To project an expected sales picture:** By using the territorial breakdown and total market potential figures provided by SIC data, and by comparing these estimates with the territorial capacity of the existing sales force, it is possible to predict what part of the market the new product will initially penetrate. Detailed measurements of sales in sample territories can be projected to the remaining areas to gain a reasonably accurate picture of the overall potential.

6. **To check on the expected effect of competition:** With the same data it is also possible to determine the geographical potential of competitive companies. Then, by comparing these estimates with the sales coverage of your own company, you can get some idea of your future share of the market and of what you must do to increase it.

The SIC data can do much to provide a complete picture of the market. It is not, however, in itself, a pat answer to your marketing problems. Blind faith in the general methods described above may lead to a wholly inaccurate marketing picture. The specific case will always call for modifications and improvements. It is essential, therefore, to check continually the pertinency of your information, to make certain that the data being used relate to your specific situation, and to see that the obvious gaps in the SIC listings are supplemented.

Typical mistakes in using SIC data include:

Failure to break down SIC categories to a sufficiently fine degree so that the differences that have an important bearing on the market for your product are noted and studied.

Failure to consider the alternatives presented by the SIC data. Sometimes there is only one conclusion that presents itself and on which your sales policies can confidently be based. More often, however, several alternatives present themselves. Since no sales manager can afford the luxury of time to experiment with all of the alternatives, he must use his own judgment, and the expert advice of reliable market consultants, to decide on appropriate marketing policies.

Failure to detect all possible alternatives. Overlooking an important alternative can be as harmful as making the wrong decision between the considered alternatives.

With these qualifications in mind, the SIC system can be a valuable guide in determining successful sales policies for the new product. ◆

Another Product of the *Diversified South Bend Market*



TALOS
Built by Bendix
For Navy Bureau
of Ordnance

Bendix Aviation Corporation, prime producers of the deadly Talos guided missile, is South Bend, Indiana's largest employer. Recently the Navy let contracts of 41 million dollars to Bendix for further production and engineering of this super-sonic missile.

The Bendix Corporation is one of 1,241 manufacturers in the seven county trading area of South Bend. All of the government's 19 S.I.C. are represented. This wide diversity of industry provides the area's 203,900 families with big, steady incomes. Their buying power is 1¼ billion dollars!

HERE'S REAL COVERAGE

You cover South Bend, Indiana's 2nd market, effectively and economically with one newspaper, The South Bend Tribune—100% coverage of the City Corporate Area; 92.2% coverage of the Metropolitan Area and 62.4% coverage of the 1¼ billion dollar Trading Area. Get all the facts about Indiana's 2nd market. Write for free market data book.

The South Bend Tribune

Franklin D. Schurz—Editor and Publisher

STORY, BROOKS & FINLEY, INC. NATIONAL REPRESENTATIVES

teach and motivate people



Audiences pay undivided attention — you get action from the people you want to reach. How? Motion pictures or low-cost slidefilms. Suggestion: select a *professional* producer.

Atlas Film Corporation
OAK PARK, ILL.
CHICAGO PHONE: AUSTIN 7-8620
WASHINGTON • CHICAGO • HOLLYWOOD

ANSWERS
To Quiz on Page 15

1. 2033	10. 2819	19. 3361
2. 2091	11. 2834	20. 3431
3. 2111	12. 2911	21. 3532
4. 2224	13. 3011	22. 3662
5. 2321	14. 3141	23. 3717
6. 2322	15. 3231	24. 3721
7. 2612	16. 3241	25. 3751
8. 2699	17. 3312	26. 3861
9. 2751	18. 3352	27. 3952

4. Build an adaptive monitor into the system so that any need for modifying the system itself can be indicated and acted upon as soon as possible.

It is especially important to make sure that information about the market is coming back to the policy makers in the company, since this is the only way to keep in touch with what is happening. Not only must this information be considered, but there must be a means for acting on it promptly and decisively, just as outgoing orders are acted upon by field personnel.

What Are A New Products Chances?

While statistics show that the odds are heavily against the success of a new industrial product, some classes of technical products are more prone to failure than others. The new item that is an improvement on an accepted product line, is most common, most predictable, and most likely to succeed. The rarer, completely new product, designed to serve a new or presently non-existent market, however, is quite another undertaking.

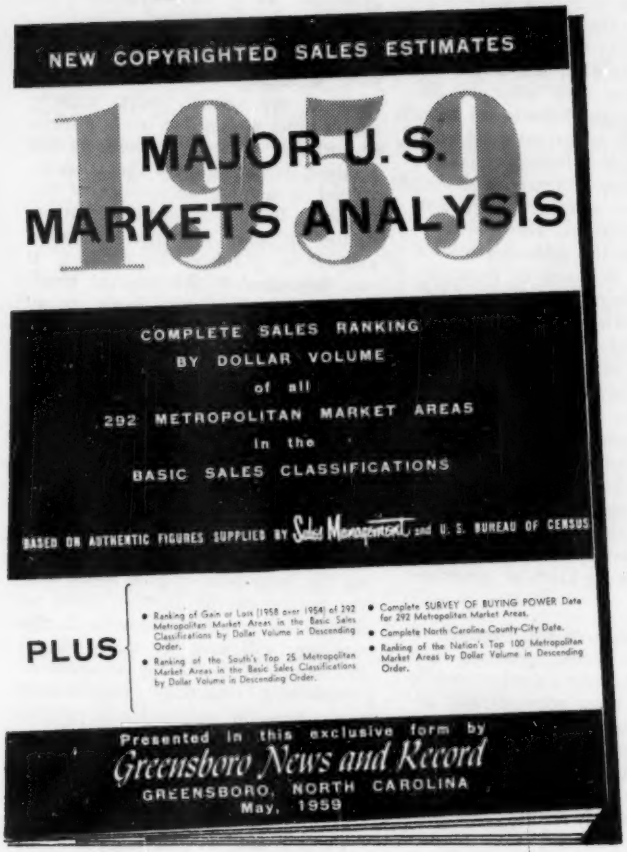
Naturally a greater proportion of these all-new products will fail. A market must often be developed along with the product. Marketing problems cannot always be predicted. Buyers are likely to resist anything that is really new. The invariable "bugs" in the product itself are bound to cause a large share of trouble. Fortunately, however, the sale of technical products is generally based on a basic need rather than an emotional drive. It is, therefore, possible to predict demand with reasonable precision. And the rewards can be greater in the long run, in terms of both growth and profit, as many companies relying on the development and marketing of radically different products have happily discovered.

Despite the many problems and pitfalls and dangers, a dynamic development program is essential to today's industrial manufacturer, Statistics, too, usually do not indicate what proportion of failures are contributed by firms ill-equipped to undertake the introduction of the product involved. By considering only those products that the company is capable of promoting successfully, it is possible to plan a new product program without too much trepidation.

Selection of New Product Ideas

How does the company get its ideas for new products, and how does it choose which to develop?

FREE! 1959 Market Study helps you put your finger on AMERICA'S TOP MARKETS



Just Published!

1959 Major U. S. Markets Analysis. Based on authentic data from Sales Management Survey of Buying Power and U. S. Bureau of Census. Published annually by Greensboro News and Record.

Highly prized by media buyers, advertising and sales managers, research and marketing experts.

Pick the Markets that Pay Off!

Put your advertising and sales dollars into the major markets that have proven their value on the basis of actual sales.

Yardstick to Measure Your Sales!

Ranking of sales in all 292 Metropolitan Market Areas by dollar volume in all basic classifications.

Ranking of Gain or Loss (1958 over 1954) of 292 Metropolitan Market Areas in all basic classifications.

Ranking of the South's Top 25 Metropolitan Market Areas in all basic classifications. Ranking by dollar volume of the Nation's Top 100 Metropolitan Areas.

For your copy of 1959 Major U. S. Market Analysis *write on company letterhead to: Advertising Research Department*

Greensboro News and Record, GREENSBORO, N. C.

79th MARKET IN THE NATION—15th IN THE SOUTH IN TOTAL RETAIL SALES

or JANN & KELLY Newspaper Representatives

Chicago
360 N. Michigan Ave.

Atlanta
323-24 Palmer Building

New York
366 Madison Ave.

San Francisco
111 Sutter St.

Detroit
926 Buhl Building

Los Angeles
2412 7th St.

Kansas City
1009 Baltimore Avenue



New product ideas can be stimulated from many sources both inside and outside the company. While these sources must be continually encouraged, a careful screening is necessary to prevent investing in products with no chance of commercial success. Technically sound products may seem economically sound to the engineering department, yet may have serious non-technical marketing flaws. On the other hand, products sometimes develop that seem to have marketing possibilities, but which no one seems quite sure what to do with. Here it might be wise to turn the idea over to an experienced outside research group before considering its possibilities. Pet products, too, should be given a fair, though not favored, consideration. The real danger here is that the intense personal interest of the engineer or company executive pushing the idea may becloud the marketing picture. All ideas, no matter what their source, must be made to stand the acid test of objective analysis.

A preliminary screening by a market-oriented committee, or a new-product specialist, is one of the most important and least appreciated stages in choosing a new product. To determine which ideas have potential, the preliminary study should include the following kinds of considerations:

1. **The relation of the product to the company:** Some products are inherently big-company products while others can be more economically developed by smaller concerns. Many worthy products have failed because they were developed by the wrong companies. A wrong choice in this respect could simply result in one company pointing the way to a market which another company would dominate. Even where the company has the technical know-how to produce the product, it must decide whether it has the marketing know how to sell the product.

2. **The nature of the market for the product:** Is the company completely familiar with the detailed characteristics and peculiarities of the market to be served by the product? Is information on the market readily available? Can it be easily and reliably gathered? For the industrial product, especially, it is important to determine whether the researchers have the technical knowledge and ability to absorb and analyze the marketing data.

3. **The relations of the company to the market:** Does the company have the inherent capability to exploit the indicated market properly? Will the product fit conveniently into the present marketing organization of the company? Can the sales force be retained to fit the product, or is a special organization needed to sell it? Does the product have any special advantage to offer, or will its addition be just another product to an already loaded sales force? Is the product competitive to the company's present products? Is it to competitive to prime customer interests?

4. **Possible pitfalls:** The preliminary screening can also determine whether any special codes, approvals, or other regulations could impede or seriously delay acceptance of the product. It can analyze the costs involved in gaining acceptance of the product. It can make sure that no undue internal influence is being exerted to promote the product. It can determine if the product straddles two technologies (such as an electronic device for medical use), where the company is experienced in only one of the fields. And it can decide which parts of the market picture should be passed on to company executives and departments for immediate study and advice.

Preliminary screening can, in effect, determine whether there is any possibility at all for developing the product successfully. By so eliminating the large bulk of good ideas that, for one reason or another, have no chance of commercial success, the company will save the time, efforts, and money of its various departments —marketing, finance, engineering, production—for practical and promising ideas.

The New Product Survey

Once a product idea has passed its preliminary screening, it must be passed on to the various departments of the company so that a detailed development program can be considered. It is advisable at this point for the marketing group to prepare some sort of a preliminary survey to establish its first estimates of market potential. As the product undergoes further study and budgets are set up, continual market surveys should be made both to provide guidance for the development group and to keep abreast of new developments.

Simultaneously, the market-research group must provide more extensive and precise estimates of market potential. Well before the final decision to manufacture is made, both the total market potential and the company's expected penetration should be known.

The methods for gathering market data, both for the preliminary study

How to turn research pennies into advertising dollars



Rarely is there enough money in an advertising budget for *all* of the things that should be done. One of the sound activities usually short-changed is advertising research, especially in industrial advertising budgets.

Yet, if a relatively small percentage—even of relatively small budgets—is set aside for advertising research, that small expenditure can greatly increase the effectiveness of the remainder.

It can tell you important things you can find out in no other way. It can confirm good judgment and point a factual finger at bad. It can uncover sins of omission and commission in both media and message. It can make every advertising dollar a better investment in sales.

Advertising research need not be costly, or complicated. Much of it can be done by the advertising department, or by the advertiser and agency working together. The opportunities are limited only by imagination.

After all, the main essentials are common sense and an open mind—qualities at least as prevalent among advertisers as among professional research organizations. (When extensive field interviewing, psychological motivation research, technical product analysis and other specialized techniques are needed, there is no substitute for the trained and qualified research firm. But the problems of advertising research, in most cases, are not that complicated.)

We spend a share of our profits each year in advertising research aimed at maintaining a high standard of quality for our product. We also urge our clients to earmark a part of their budgets for such research, and we help them in a number of ways. For instance, we ask client advertising managers to pin-point the buying influences in their own companies, and then we and they actually do the interviewing to validate readership habits of these key industrial buyers. We sometimes pretest ads before publication with prospective purchasers. Currently we are conducting a major mail readership study at the purchasing level among a representative sample of companies—with the results to be made available to all clients.

There is virtually no end to the ways in which advertising research can be done at a cost of a few pennies on the budget dollar. And these pennies multiply themselves many times—as advertising money should do when it is invested in the right way, at the right time, in the right place.

Marsteller, Rickard, Gebhardt and Reed, Inc.

ADVERTISING

NEW YORK • PITTSBURGH • CHICAGO • HOUSTON

AFFILIATES

PUBLIC RELATIONS • BURSON-MARSTELLER ASSOCIATES, INC.

MARKETING COUNSEL • MARSTELLER RESEARCH, INC.

and for the final analysis, are similar, though in the more complete study, somewhat more sophisticated. The same channels of information can be employed in both cases, though they must be examined more thoroughly in the latter. Data collected by personal interview, by mailed questionnaires, and by a study of the SIC can be especially valuable in providing information for a reliable market analysis. Again, the distinction must be made between the more conventional types of new products and the completely new, unprecedented product. Where similar products have been developed and a market already exists, data can be compiled in a fairly routine manner from salesmen, customers, and other standard sources. Where no similar product or product line has ever existed, however, the problems of gathering accurate and reliable data are intensified.

The first stage in an analysis of potential markets for an unprecedented, new product should be based on data collected by qualified personal interviewers. It is essential in this case, to be sure that both the interviewers and the respondents know just what the product is. It is incredibly easy to distort a market picture simply by failing to make sure the respondent understands just what the product is. While qualified interviewers are a prerequisite for any survey, it is all the more important when they must explain and analyze the technological components and implications of a product that no one has ever seen before.

Preliminary Interviews

Even when the respondent understand the project, his replies may be misleading. Often, for instance, people will give one answer when they think that they are being asked what *someone else* would want, and a completely different answer to what they *themselves* might buy under a set of given circumstances. Interviews, therefore, must usually be conducted in several steps, the earlier of these being designed primarily to precondition potential users for a later and more meaningful interrogation.

After these penetrating interviews have been completed, there should be valuable material available from which to design a detailed mail questionnaire. Questionnaires, of course, can reach many more people than can personal interviews, and will provide the broad base necessary for a complete picture of the market. A note of warning: no matter how good the questionnaire seems, check it out on a small test run to make sure it brings the type of response you want. With this information, and that gathered from the SIC, you're well on the way to determining what market will exist for your product.

moving service to all 50 STATES



Wheaton offers prompt, dependable service to all 50 states by land, sea and air. Alaska by air, Hawaii and many foreign countries by sea. For your next moving assignment, call a Wheaton agent.

Wheaton Van Lines, Inc.
COAST TO COAST LONG DISTANCE MOVING
General Offices: Indianapolis, Indiana
In the West call LYON
OVER 525 AGENTS IN ALL PRINCIPAL CITIES

ALL INDUSTRY THRIVES IN LYNCHBURG



Lynchburg (Campbell County) is the most diversified industrial region in central Virginia, with employment in *every* S.I.C. manufacturing category. In only 8 of these are there less than 100 employees.

For *any* manufacturing industry, Lynchburg is a proven site for successful operation!

LYNCHBURG CHAMBER OF COMMERCE
Lynchburg, Virginia

Contact the Lynchburg C of C for detailed information on these features:
Central Virginia, 200 miles from Hampton Roads and Norfolk.
•
3 trunk railroads, 19 motor freight lines, 3 passenger bus (1 urban), 3 U.S. Highways—29, 460, 501.
Favorable Labor, Water Supply abundant; Natural Gas; Adequate Electricity, Reasonable Taxes, Diversified Industry—96 manufacturers. Very best Living Conditions; ideal year-round climate, Excellent Schools—4 colleges, 21 public schools, with outstanding vocational training.

SITES AVAILABLE • LOCAL CAPITAL WILL ASSIST NEW SELF-SUSTAINING INDUSTRY

A Guide to Markets Served by Miller Freeman Publications

SAN FRANCISCO

500 Howard Street, San Francisco 5, EXbrook 7-1881. Complete administrative headquarters. Editorial, Sales, Publishing Headquarters: MINING WORLD, WORLD MINING, WESTERN BAKER, PACIFIC LAUNDRY & CLEANING JOURNAL. San Francisco District Office all other publications.

NEW YORK

370 Lexington Ave., New York 17, MUrray Hill 3-9294. Sales and Production Headquarters: PULP & PAPER, PULP & PAPER INTERNATIONAL. Editorial, Sales and Publishing Headquarters: CLEANING AND LAUNDRY AGE. New York District Office all other publications.

CHICAGO

1791 Howard Street, Chicago 26, ROgers Park 4-3420. Editorial Headquarters: PULP & PAPER, PULP & PAPER INTERNATIONAL. Chicago District Office all other publications.

SEATTLE

71 Columbia Street, Seattle 4, MAin 2-1626. Editorial, Sales, Publishing Headquarters: PACIFIC FISHERMAN, PACIFIC WORK BOAT. Editorial Director THE TIMBERMAN, THE LUMBERMAN. Pacific Northwest Manager: SEA & Pacific Motor Boat. Seattle District Office all other publications.

CLEVELAND

4500 Euclid Avenue, Cleveland 3, EXpress 1-4180. Cleveland District Office all publications.

VANCOUVER, BRITISH COLUMBIA

402 Pender Street, W., Vancouver 3, MUtual 5-7287. Editorial, Sales, Publishing Headquarters: CONSTRUCTION WORLD. Vancouver District Office all other publications.

LOS ANGELES

3501 Eagle Rock Blvd., Los Angeles 65, CLinton 5-7194. Editorial, Sales, Publishing Headquarters: SEA & Pacific Motor Boat. Los Angeles District Office all other publications.

ATLANTA

2640 Winding Lane, N.E., Atlanta 19, MElrose 6-2385. Headquarters: Southern Editor PULP & PAPER.

PORTLAND, OREGON

731 S.W. Oak Street, Portland 5, CApitol 2-1314. Editorial, Sales, Publishing Headquarters: THE TIMBERMAN, THE LUMBERMAN, WESTERN BUILDING. Headquarters: Western Editor PULP & PAPER. Portland District Office all other publications.

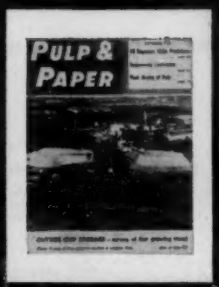
LONDON, ENGLAND

130 Crawford Street (Corner Baker Street), London W.1, WElbeck 3624. United Kingdom Headquarters Miller Freeman Publications.

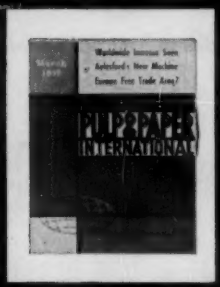
COLOGNE, WEST GERMANY

Kantstrasse 22, Köln-Kalk, Tel: 871752. Director of European Operations Miller Freeman Publications.

For complete information on markets served by Miller Freeman Publications, you are cordially invited to write or phone the office nearest you.



ABC, ABP (Class 109). Pulp, paper, paperboard industry, North America.



Controlled (Class 109, 43). Int. (Non U.S.) pulp, paper, paperboard industry.



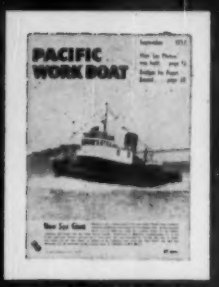
ABC (Class 14). Pleasure boating, 11 western states, Alaska, Hawaii.



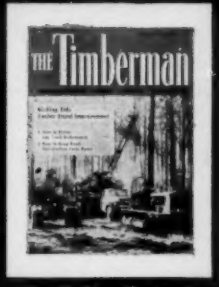
BPA (Class 43, 93). International (Non U.S.) metal mining industry.



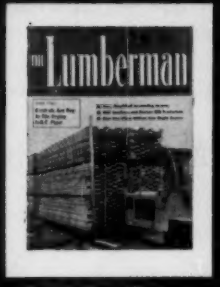
ABC, ABP (Class 93). Metal mining industry of North America.



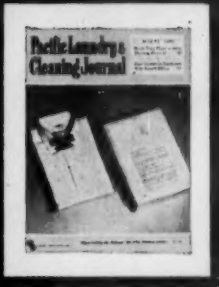
ABC, ABP (Class 84). Work boat industry, 11 western states, Alaska, Hawaii.



ABC, ABP (Class 83). Logging, trahsportation, forest management, North America.



ABC, ABP (Class 83). Lumber, plywood, board, wood mfg., North America.



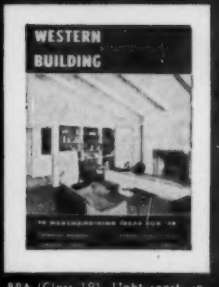
ABC, ABP (Class 78, 29). Commercial laundry and drycleaning, 11 western states.



CCAB, BNA (Canadian MR&D Class 41). Heavy const. industry, Western Canada.



ABC, ABP (Class 48). Comm. fisheries of Pacific; processors, boat operators.



BPA (Class 19). Light const. industry, 11 western states, Alaska, Hawaii.



BPA (Class 29, 78). Laundry and Cleaning industry, United States.



ABC, ABP (Class 9). Comm. baking industry, 11 western states, Alaska, Hawaii.

MILLER FREEMAN PUBLICATIONS

SERVING NATIONAL, INTERNATIONAL AND REGIONAL INDUSTRIES CONSTRUCTIVELY SINCE 1902

Number 6 in a series to American business on the multiplying growth at the top of the market.

The happiest sound is the



From 1948 to 1958 the U. S. population soared from 146.6 million to 174.1 million—an increase of 19%. An impressive growth? Just check these percentages and compare:

The number of two-car families went up to a new level of 396%.

The number of residential swimming pools rose an outstanding 4,896%.

The number of Americans who became overseas travelers increased 215%.*

These are the people who are creating the boom at the upper level—and making it sound clear across America.

The boom began just after World War II—and it's picking up decibels every day. Who's behind it? Some 8 to 10 million well-educated, upper-income Americans who make the decisions, establish the trends, set the styles of this nation locally and nationally. With, of course, the consent (and even the admiration) of their fellows.

Are they all TIME readers? Certainly not. But many, many of them rely on TIME to keep them well informed in every area of interest. And those who don't read TIME are surrounded by TIME-reading friends, business associates, colleagues and families.

These millions make the great years for advertisers selling *anything*—from stocks to steel, from packaged goods to private planes . . . to corporate personalities. They can make this year—and every year—a great selling year for you.

You can reach these special millions with maximum effectiveness only in their favorite magazine, TIME, The Weekly Newsmagazine.

*And the same kind of growth occurred in the business world. Executives and professionals increased more than twice as fast as the total labor force.

Make the most of it in TIME

boom at the upper level



SM State Industrial Directories

This list of state industrial directories has been compiled to help you do an optimum industrial marketing job. In addition to data for pinpointing specific industrial markets to be found in this *Survey*, it can assist you in further exploring and isolating industrial potentials and in proceeding to the final step: location of plants by name and street address.

Some of the directories can be of help in determining the SIC classification of your customers. For example, you can look up any of your New York State customers in the Industrial Directory of New York State. This has an alphabetical listing by company name that is cross-indexed to the product section which is arranged by 4-digit SIC.

Data in the list, which has been compiled by SALES MANAGEMENT, are based on direct contact by this magazine with every state industrial directory publisher. In each case the latest directory is listed.

The only city and county directory listed is that of Honolulu, Hawaii, which was included only because our 50th state has not as yet a state industrial direcory.

A valuable feature of the list is the notation as to whether the directories listed use the Standard Industrial Classification (SIC). This is indicated in the "Data" line for each directory, which also indicates, under "Product Classification," how the SIC is used.

The "Code" explanation is at the foot of the page. It also indicates whether plant names are arranged alphabetically, with or without cross-indexing, or geographically, or both ways.

ALABAMA

Industrial Alabama 1959

Published every third year by Alabama State Chamber of Commerce, 468 S. Perry St., Montgomery 1. (260 pgs.; $5).
Data: 1, 5, 7, 11, 12, 14, 15, 16, 17, 18, 19, 20

ARIZONA

Arizona Manufacturers 1960

In preparation now and will come from the press November 1, 1959.
Published (contemplating revision annually) by Phoenix Chamber of Commerce, 124 N. Second Ave., Phoenix. (approximately 75 pgs.; $2).
Data: 8, 11, 12, 14, 17, 19

ARKANSAS

A Directory of Arkansas Industries August 1957 with supplement to August 1958

Published biannually with annual supplements by Arkansas Industrial Development Commission, State Capitol, Little Rock. (200 pgs.; $5).
Data: 1, 4, 5, 7, 12, 15, 16, 17, 19

CALIFORNIA

California Manufacturers Register 1959

Official directory publication of California Manufacturers Association
Published annually by The Times-Mirror Press, Division of Times-Mirror Co., 1115 S. Boyle St., Los Angeles 23. (978 pgs.; $25).
Data: 8, 11, 12, 13, 14, 15, 17, 19

COLORADO

Directory of Colorado Manufacturers 1959

Published annually by The Bureau of Business Research, The University of Colorado, Boulder. (106 pgs.; $7.50).
Data: 1, 2, 3, 8, 9, 11, 15, 16, 17, 19

CONNECTICUT

Directory of Connecticut Manufacturing and Mechanical Establishments 1957

Published by State of Connecticut Labor Department, 92 Farmington Ave., Hartford. (Latest edition was 1957—supply exhausted. 1959 edition is being planned for availability in the fall of 1959. Number of pages in 1959 edition undetermined. The price will probably be $1).
Data: 1, 2, 9, 11, 17, 19

DELAWARE

Directory of Manufacturers, State of Delaware 1958

Published (no set dates) by Delaware State Chamber of Commerce, Inc., 1112-14 King St., Wilmington. (66 pgs.; $5).
Data: 11, 12, 15, 17, 19

FLORIDA

Directory of Florida Industries 1959-60

Published biennially by Florida State Chamber of Commerce, 8057 Expressway (Arlington, P. O. Box 8046), Jacksonville 11. (500 pgs.; $6).
Data: 1, 4, 5, 11, 14, 15, 16, 17, 18, 19, 20

GEORGIA

Georgia Manufacturers 1959

Published biennially (supplement usually published annually) by Georgia Department of Commerce, 100 State Capitol, Atlanta 3. (450 pgs.; $5).
Data: 8, 11, 15, 16, 17, 18, 19, 20

HAWAII

An industrial directory for the state has not as yet been published. There is available, however, a **Directory of Manufacturers—City and County of Honolulu 1957.** Published by Chamber of Commerce of Honolulu, Dillingham Transportation Bldg., Honolulu 13. (9 pgs.; $1). The Kauai, Maui and Hawaii Chambers of Commerce have mimeographed directories of manufacturers for their respective counties. These were published in 1955 and have never been revised. They also use the Standard Industrial Classification for manufacturing industries.
Data: 1, 8, 9, 12, 14, 15, 16, 19

IDAHO

Idaho Industrial Directory 1954-55

Published at indefinite intervals by Idaho State Chamber of Commerce, 524 Idaho Bldg., Boise. (50 pgs.; $2.50). The 1954-55 edition is out of print and publishing date for a new edition has not been determined.
Data: 8, 12, 17, 20

ILLINOIS

Illinois Manufacturers Directory 1959

Published annually by Manufacturers' News, Inc., 20 E. Huron St., Chicago 11. (1,756 pgs.; $25 plus 60¢ handling and postage).
Data: 8, 11, 12, 13, 15, 16, 17, 18, 19, 20

INDIANA

Indiana Industrial Directory 1958-59

Published every four years (considering more frequent issues) by The Indiana State Chamber of Commerce, Board of Trade Bldg., Meridian at Ohio St., Indianapolis 4. (277 pgs.; $12).
Data: 8, 11, 12, 14, 17

IOWA

Iowa Directory of Manufacturers 1959

Published biennially by Iowa Development Commission, 200 Jewett Bldg., Des Moines 9. (270 pgs.; $7.50).
Data: 1, 2, 3, 4, 5, 8, 9, 11, 15, 16, 17, 19, 20

KANSAS

Directory of Kansas Manufacturers and Products 1958-59

Published biennially by Kansas Industrial Development Commission (1960-61 edition will be available January 1950). State Office Bldg., Topeka. (210 pgs.;

Data Code: 1. Uses SIC; 2. 2-Digit SIC; 3. 3-Digit SIC; 4.4-Digit SIC; 5. 4-Digit SIC & Product Name; 6. Product Classification Numbers other than SIC; 7. Product Classification Alphabetically with Numbers; 8. Product Classification Alphabetically no Numbers; 9. SIC Sequence no Numbers; 10. Other; 11. Number Employes; 12. Name of Official; 13. Capitalization; 14. Trade & Brand Names; 15. Alphabetical Listing; 16. Alphabetical Cross-Indexing; 17. Geographical Listing; 18. Geographical Cross-Indexing; 19. Product Classification Listed; 20. Product Classification Cross-Indexed.



PROGRESS in LOUISIANA

1958

Total effective buying income

$4,345,556,000

Total retail sales **$2,824,704,000**

Total population 3,132,600

An increase of 16.7% since 1950.

Louisiana Ideal for Plant Location

TAKE ADVANTAGE OF LOUISIANA'S
NATURAL RESOURCES

Unlimited Water Supply • Sulphur • Limestone • Salt • Forest Products • Oil • Natural Gas • Splendid Year-Round Climate • Ample Labor Supply • 10 Year Tax Exemption • Community Financing.

Sites available to meet every requirement —
Information furnished at no cost

Get the Facts, write:

LOUISIANA
Department of Commerce & Industry
Curt Siegelin, Exec. Director
P.O. Box 4185 • Baton Rouge 4, La.

free to business firms requesting on business letterheads).
Data: 1, 5, 7, 11, 15, 17, 19, 20

KENTUCKY

Kentucky Industrial Directory 1957-58

Published biannually (1959-60 directory now being compiled), by Kentucky Department of Economic Development and Kentucky Chamber of Commerce, 670 S. Third St., Louisville 2. (471 pgs.; $7.50).
Data: 1, 2, 8, 11, 12, 14, 15, 16, 17, 18, 19, 20

LOUISIANA

Louisiana Directory of Manufacturers 1959

Published biannually by Louisiana Department of Commerce and Industry, P. O. 4185, Capitol Station, Baton Rouge 4. (261 pgs.; $2.50).
Data: 6, 7, 11, 12, 14, 15, 17, 19

MAINE

Maine Buyers Guide and Directory of Maine Manufacturers 1959

Prepared by the State of Maine Department of Labor and Industry, Division of Research and Statistics, and published biennially by the Department of Economic Development, Augusta. (200 pgs.; no charge).
Data: 1, 11, 14, 16, 17, 18, 19, 20

MARYLAND

Directory of Maryland Manufacturers 1959

Published every two to three years by State of Maryland, Department of Labor and Industry, State Office Buildings, 301 W. Preston St., Baltimore 1. (69 pgs.; $3).
Data: 11, 15, 17, 19

MASSACHUSETTS

A Directory of Massachusetts Manufacturers 1959

Published annually by Massachusetts Department of Commerce, 150 Causeway St., Boston 14. (approximately 400 pgs.; price to be determined). May be purchased from The Secretary of State's Office, Public Document Room 116, State House, Boston.
Data: 1, 2, 3, 4, 5, 11, 16, 17, 19, 20

MICHIGAN

The Directory of Michigan Manufacturers 1959

Published biennially by Michigan Manufacturer and Financial Record, 8543 Puritan Ave., Detroit 38. (500 pgs.; $22 plus sales tax 66¢ if delivered in Michigan).
Data: 10, 11, 12, 15, 16, 17, 18, 19, 20

MINNESOTA

Minnesota Directory of Manufacturers 1959-60

Published biannually by Minnesota Department of Business Development, 213 State Office Bldg., St. Paul 1. (170 pgs.; $5). Available from Documents Section, Department of Administration, 115 State Capitol, St. Paul 1.
Data: 1, 4, 5, 11, 12, 17, 19, 20

MISSISSIPPI

Mississippi Industrial Directory 1958

Published approximately every three years (with annual supplements provided each year to keep it up to date) by Industrial Department of the Agricultural and Industrial Board, 1504 State Office Bldg., Jackson 106. (90 pgs.; $5).
Data: 10, 11, 12, 14, 15, 17, 19

MISSOURI

Missouri Directory of Manufacturers 1958

Published every four years by Missouri Division of Resources and Development, Jefferson Bldg., Jefferson City. (171 pgs.; $10).
Data: 1, 5, 11, 15, 19, 20

MONTANA

Montana Directory of Manufacturers 1958

Published by Engineering Experiment Station, Montana State College, in cooperation with Montana State Planning Board, Helena. (79 pgs.; $1.50).
Data: 6, 9, 11, 12, 15, 16, 17, 18

NEBRASKA

Directory of Nebraska Manufacturers 1958

Published biennially by Division of Nebraska Resources, 1107 State Capitol Bldg., Lincoln. (117 pgs.; $2).
Data: 1, 8, 11, 12, 15, 19

NEVADA

A List of Nevada Manufacturers 1958

Published (No definite date set.) by Nevada Department of Economic Development, Carson City. (5 pgs.; free of charge).
Data: 17, 19

NEW HAMPSHIRE

Made in New Hampshire – Directory of Manufacturers and Manufactured Products 1958

Published annually by New Hampshire State Planning and Development Commission, State House Annex, Concord. (110 pgs., $1).
Data: 8, 11, 12, 15, 17, 19

NEW JERSEY

New Jersey Industrial Directory Plus The New Jersey Industrial Market Place 1958-59

Published in the even years (1958, 1960, etc.) by New Jersey State Industrial Directory, Port Authority Bldg., 111 Eighth Ave., New York 11. (504 pgs.; $25 plus postage, handling and NYC sales tax if applicable).
Data: 6, 8, 10, 11, 12, 15, 16, 17, 18, 19, 20

NEW MEXICO

Directory of New Mexico Manufacturing and Mining 1958

Published (no regular publishing date) by Bureau of Business Research, University of New Mexico, 1821 Roma, N. E., Albuquerque. (100 pgs.; $5).
Data: 1, 4, 5, 7, 11, 12, 15, 16, 17

NEW YORK

Industrial Directory of New York State 1958

Published approximately every four or five years by New York State Department of Commerce, 112 State St., Albany 7. (964 pgs.; $15).
Data: 1, 2, 4, 5, 11, 12, 15, 16, 17, 18, 19, 20

NORTH CAROLINA

North Carolina Directory of Manufacturing Firms 1956 with 1958 supplement

Published every four years (At two-year intervals in between regular publication a supplement listing new firms is published and sent free of charge to purchasers of the full directory.), by North Carolina Department of Labor, P. O. Box 1151, Raleigh. (Full directory 540 pgs.; supplement 48 pgs.; $5).
Data: 1, 2, 4, 11, 12, 15, 17, 19

NORTH DAKOTA

North Dakota Industrial Directory 1959

Published annually by North Dakota Economic Development Commission, Bismarck (Number of pages undetermined when this list was compiled. 1959 edition was planned to come from the press about June 1; $2).
Data: 1, 4, 7, 11, 15, 17, 19

OHIO

Directory of Ohio Manufacturers 1958

Published annually by Department of Industrial Relations, Division of Labor Statistics, Columbus 15. (761 pgs.; $3).
Data: 1, 4, 15, 16

OKLAHOMA

Oklahoma Manufacturers Directory 1959

Published biannually by Department of Commerce and Industry, State of Oklahoma, Oklahoma Farm Bureau Bldg., Oklahoma City. (154 pgs.; $2.50).
Data: 1, 4, 5, 7, 11, 15, 17, 19

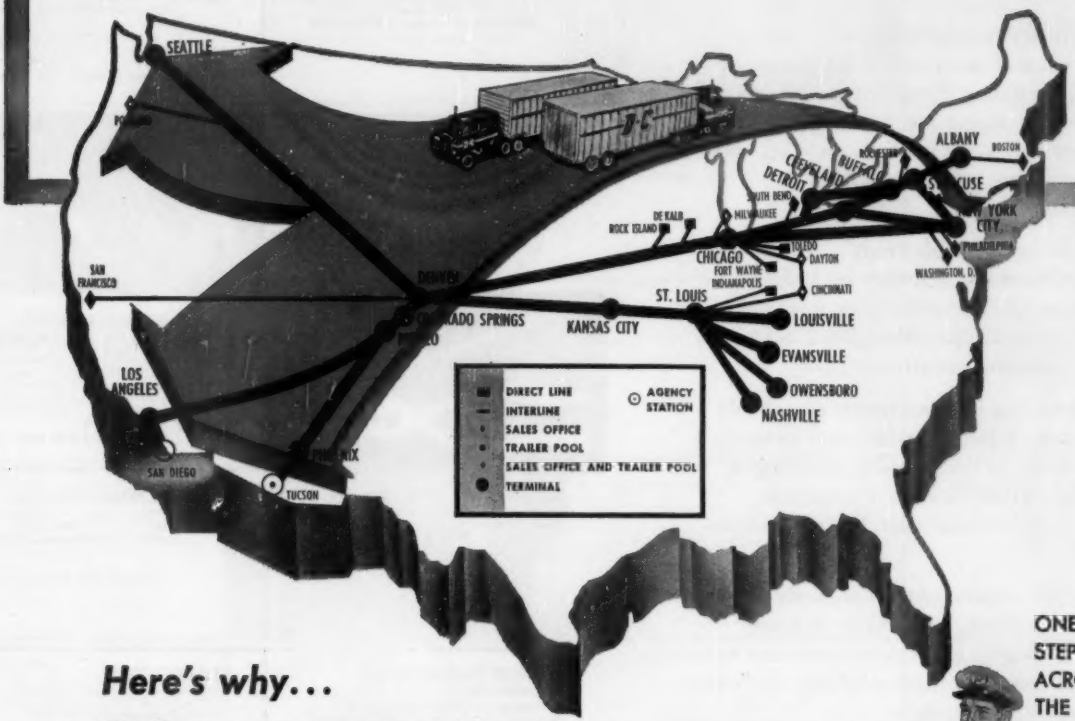
OREGON

State of Oregon, Manufacturer's Directory and Buyer's Guide, 1959

Published (no regular period at present but hope to publish one biennially) by State of Oregon Department of Planning and Development, 720 State Office Bldg., Portland. (152 pgs.; $2).
Data: 8, 11, 12, 15, 17

Data Code: 1. Uses SIC; 2. 2-Digit SIC; 3. 3-Digit SIC; 4. 4-Digit SIC; 5. 4-Digit SIC & Product Name; 6. Product Classification Numbers other than SIC; 7. Product Classification Alphabetically with Numbers; 8. Product Classification Alphabetically no Numbers; 9. SIC Sequence no Numbers; 10. Other; 11. Number Employes; 12. Name of Official; 13. Capitalization; 14. Trade & Brand Names; 15. Alphabetical Listing; 16. Alphabetical Cross-Indexing; 17. Geographical Listing; 18. Geographical Cross-Indexing; 19. Product Classification Listed; 20. Product Classification Cross-Indexed.

Sales Managers are specifying D-C's direct, coast-to-coast service



Here's why...

- **D-C is the ONLY DIRECT** Coast-To-Coast Carrier.
- **D-C is FASTER**—One-carrier direct service from coast-to-coast. 2-man sleeper cabs go straight-thru with no transloading—cuts 20% off running time.
- **D-C is SAFER**—One-carrier responsibility from pickup to delivery assures safe arrival, speeds tracing.
- **D-C is MORE DEPENDABLE**—One carrier control means experienced personnel, modern equipment and facilities *all the way.*

TERMINAL CITIES

Albany, New York	UN. 9-8416	Los Angeles, Cal.	AN. 8-8211
Buffalo, New York	RE. 3910	Nashville, Tenn.	CH. 2-5284
Chicago, Illinois	LA. 3-7440	New York, New York (N. Bergen, N. J.)	LO. 4-3320 UN. 3-0900
Cleveland, Ohio	SH. 9-1666	Owensboro, Kentucky	MU. 3-5363
Colo. Springs, Colo.	ME. 2-1486	Phoenix, Arizona	AL. 8-5321
Denver, Colorado	DU. 8-4567	Pueblo, Colorado	LI. 3-4425
Detroit, Michigan	VI. 3-9505	St. Louis, Missouri	CH. 1-7830
Evansville, Indiana	HA. 3-6487	Seattle, Washington	MA. 4-3850
Kansas City, Mo.	HU. 3-9343	Syracuse, New York	GR. 1-4103
Louisville, Ky.	ME. 6-1361		

OFF-LINE SALES OFFICES

Boston
**Cincinnati
*Dayton
**DeKalb, Ill.
**Ft. Wayne
**Indianapolis
*Milwaukee
New York
Philadelphia
*Portland, Ore.
Rochester, N.Y.
**Rock Island, Ill.
San Francisco
South Bend, Ind.
**Toledo
Washington, D. C.

*With Trailer Pool **Trailer Pool Only

ONE STEP ACROSS THE NATION



Get new customers—keep them satisfied—with **D-C** *the coast-to-coast choice for coast-to-coast service!*

D-C Denver Chicago Trucking Co., Inc.
THE ONLY
COAST-TO-COAST CARRIER

Purchasing Week

MI
MARKETING
INFORMATION
REPORT

Purchasing Week readers are searching for these

INDUSTRY hasn't satisfied the product and materials needs of many purchasing executives. A recent PURCHASING WEEK survey made that fact quite plain. The survey sought answers to the question, "What products could you use right now that are not yet available from manufacturers?"

Some of the specific items which purchasing executives said they are looking for are shown at right. (In some cases, we found the item to be available, although it is not known to some purchasing executives.)

It's not surprising that purchasing men should be trying hard to locate products and materials that will do things better, faster, and cheaper. That's a big part of their job. For example, a profile study of PURCHASING WEEK's audience reveals that...

71% of the respondents are primarily responsible *for developing new sources of supply;*
94% are involved *in developing alternate materials;*
80% participate *in deciding whether to "make — or buy" a component.*

To introduce a new product... or to inform American industry about ANY product, material, or service... it would be costly to overlook the purchasing executive in your marketing plans.

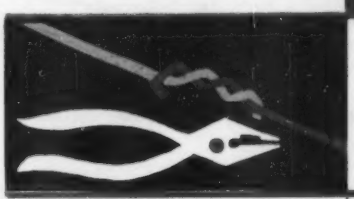
And be sure to take advantage of the tremendous fund of information which PURCHASING WEEK has accumulated to help you in your marketing efforts directed to business and industry. Your local PURCHASING WEEK representative will be glad to show you data about the purchasing agent's information needs... his buying influence... and how advertising in PURCHASING WEEK gets buying action.

RELAY—
"Plug-in type relay with changeable contacts, changeable contacts normally open to normally closed, normally closed to normally open."
...PURCHASING WEEK Reader in Massachusetts

SOLENOID SWITCH—
"I would like to see a silent solenoid switch made."
...PURCHASING WEEK Reader in California

LIMIT SWITCH—
"Inexpensive, high resolution, proximity-type limit switch."
...PURCHASING WEEK Reader in Massachusetts





PLIERS WITH SAFETY FEATURE—
"A wire cutting plier for cutting baling wire from around bales of woodpulp, which at the same time, will fold the end of the wire under to eliminate the sharp ends. The present cutting pliers available for this purpose, allow the ends of the wire to protrude after cutting, and these sharp ends create a hazard to the workers from puncture wounds."
...PURCHASING WEEK Reader in Ohio

NON-DESTRUCTIVE TESTING EQUIPMENT—
"A machine safe for industrial use that can show the inside of a casting or forging on some sort of TV screen so that porosity, cracks, etc., can be told at a glance without the trouble of x-ray, negatives, films, etc."
...PURCHASING WEEK Reader in Pennsylvania

STEEL COIL-HANDLING EQUIPMENT—
"An economical device for protecting and handling coils of narrow steel bands."
...PURCHASING WEEK Reader in Maryland

CORROSION RESISTANT COATING FOR ALUMINUM—
"A material that would coat aluminum or an aluminum alloy that would stand up against corrosion in water and having both a high alkaline and a high acid resistance."
...PURCHASING WEEK Reader in California

PLASTIC MATERIAL—
"Plastic material suitable for extrusion which will withstand 200° temperature. Must not distort during moulding operation."
...PURCHASING WEEK Reader in Illinois

INSULATING MATERIAL—
"Spray type insulation having .5K Factor with single application."
...PURCHASING WEEK Reader in Illinois

PLASTIC MATERIAL—
"A plastic that can be used under extremely high temperatures."
...PURCHASING WEEK Reader in Rhode Island

PAPER ROLL HANDLING DEVICE—
"A paper roll handling device for large toilet tissue rolls (36" dia. x 65" long) which can be mounted on a fork truck and will permit 90° rotation from vertical in either direction. This must not be a clamp type device."
...PURCHASING WEEK Reader in Michigan

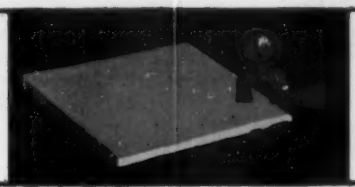
PLASTIC MOLD—
"A practical way of making molds for short-run thermosetting and thermoplastic parts without machining them out of steel."
...PURCHASING WEEK Reader in Massachusetts

Purchasing Week
McGRAW-HILL'S NATIONAL NEWSPAPER OF PURCHASING

new products and materials...

BAG DUMPING MACHINE—
"Apparatus for the automatic dumping of dry material from paper sacks (75#-100#). The apparatus should be designed so that bags could be dumped at a point remote from the man handling it. This apparatus would speed-up unloading of dry materials and, if remote, would relieve odor and dust that some materials have—example, Pará."
...PURCHASING WEEK Reader in Washington

WIRE TESTING MACHINE—
"Machine for testing non-ferrous wire in diameter range .001" to .020", non-destructive testing, for variation in diameter, eccentricity, cracks and fissures, variation in hardness, etc."
...PURCHASING WEEK Reader in Pennsylvania



PORTABLE HARDNESS TESTER—
"Portable hand hardness tester for sheet products, ferrous and non-ferrous, in a price range of less than $50.00. (Small as possible in size—preferably size of 1" micrometer.)"
...PURCHASING WEEK Reader in Ohio

HEAVY DUTY HIGH SPEED GRINDING EQUIPMENT—
"Heavy duty pneumatic angle head grinder with speed in excess of 5000 RPM to hold ¼" x 9" x ⅞" hole depressed center grinding wheel. For use in putting bright electrical contact surface on Anode pins in a reduction plant."
...PURCHASING WEEK Reader in Alabama

CLUTCH—
"An overload clutch with easily adjustable torque levels that would provide an electrical signal if its set torque level was exceeded."
...PURCHASING WEEK Reader in Massachusetts

HIGH TEMPERATURE FURNACE—
"High temperature furnace range about 2500° C. Both tube and hearth types."
...PURCHASING WEEK Reader in Pennsylvania

BRAZING PROCESS—
"New high-speed process for brazing high-temperature, honeycomb sandwich-type materials."
...PURCHASING WEEK Reader in California

RUBBER—
"A rubber capable of withstanding 2000° F."
...PURCHASING WEEK Reader in Pennsylvania

VALVES FOR HANDLING LIQUID GASES—
"More reliable valves for handling liquid oxygen and nitrogen."
...PURCHASING WEEK Reader in California

PLASTIC EXTRUDING MACHINE—
"An extruder that will extrude plastic tubing and positively hold a tolerance of .001 the entire length of the tube."
...PURCHASING WEEK Reader in Pennsylvania

VARIABLE RESISTANCE RECEPTACLE—
"Variable Resistance Lamp Receptacle. Years ago, they were made. By turning a porcelain collar you vary the brightness of a light bulb, regulate the speed of a fan, etc."
...PURCHASING WEEK Reader in Illinois

STAIN-RESISTANT ALUMINUM ALLOY—
"A truly stain resistant aluminum alloy that is resistant to staining without further plating, dipping or brightening — that is, a sheet product that comes direct from mill in coil, sheet or plate form that is truly stain resistant."
...PURCHASING WEEK Reader in Ohio



CLEANING AGENT—
"A low-cost cleaning agent for removing cutting oils from machined metal parts — ferrous and non-ferrous. Agent to have rust resistant and non tarnishing qualities. Open type cleaning (dip)."
...PURCHASING WEEK Reader in New Jersey

SINTERED STEEL GEARS—
"Sintered steel gears of sufficient strength that they would be usable in transmission (automotive)."
...PURCHASING WEEK Reader in Michigan

LOW COST ALLOY—
"Lower cost ferro alloys in particular. Some form of chromium that could be used to make our products cheaper. Others can be included such as nickel, etc. They do not have to be ferro but should be of such composition that they can be used to make stainless steels. Perhaps oxides or other forms."
...PURCHASING WEEK Reader in Pennsylvania

BEARING MATERIAL—
"Bearing material having ten times the life of oil impregnated or porous bearings."
...PURCHASING WEEK Reader in Illinois

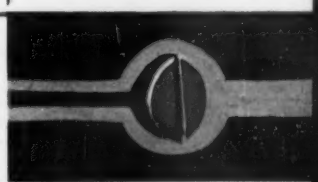
GASKET—
"Gasketing that will withstand temperature ranges of from 150°F to 900°F for intermittent use as door and window seals."
...PURCHASING WEEK Reader in California

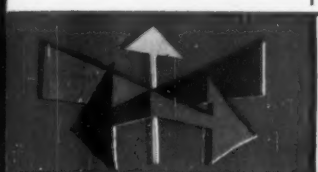
VINYL COATING—
"An air-drying vinyl resin that could be brushed or sprayed to the inside flanges and drums of shop reels to give protection to cables."
...PURCHASING WEEK Reader in Texas

HEAT EXCHANGER—
"Low cost substitute for aluminum fin on copper tube coil for heat transfer from water or steam to air."
...PURCHASING WEEK Reader in Illinois

PLASTIC MATERIAL—
"Plastic tubing — 600°F, or better."
...PURCHASING WEEK Reader in New Jersey

SOLENOID VALVE—
"A quiet operating solenoid valve."
...PURCHASING WEEK Reader in Illinois





ADJUSTABLE JIG—
"3-way adjustable locating devices for use on air presses used in assembly of semi-bulky products produced for the mass market, i.e., sporting goods, toys, automobile mufflers, appliances, etc."
...PURCHASING WEEK Reader in Ohio

MAGNETIC CONVEYER—
"Magnetic conveyer to pick up metal stampings, and deliver to storage at remote spots."
...PURCHASING WEEK Reader in New Jersey

THREAD CUTTING PIPE PLUG—
"In our production, we drill and tap a great deal of grey iron castings, after which we seal the tapped holes with a countersunk pressure pipe plug. I would like to see a countersunk pressure pipe plug made with a thread cutting feature for grey iron castings which could eliminate the tapping operation and possibly the drilling operation."
...PURCHASING WEEK Reader in Pennsylvania

DISPOSABLE PALLET—
"A 48" x 48" disposable pallet in the 50¢ cost area."
...PURCHASING WEEK Reader in Massachusetts

HIGH TEMPERATURE MATERIAL—
"Raw materials such as steel, refractories, etc., with characteristics to withstand higher temperatures, greater wearability (abrasion), and in some cases, corrosion. Also greater strength or power with less weight would always be a help on any material or product."
...PURCHASING WEEK Reader in Illinois

ELECTRO-MAGNETIC CLUTCH—
"Low-priced commercial-type miniature electro-magnetic clutch."
...PURCHASING WEEK Reader in Indiana

HIGH TEMPERATURE CABLE—
"Very high temperature coaxial cable (750°F and up)."
...PURCHASING WEEK Reader in Connecticut



Send for these Free Market Facts

Air Conditioning & Refrigeration

- ☐ The Refrigeration & Air Conditioning Wholesaler, #147R.
- ☐ A Study Of Firms Engaged in The Business Of Air-Conditioning, Heating & Commercial Refrigeration, #169R.

From: REFRIGERATION AND AIR CONDITIONING BUSINESS

Fluid Power

- ☐ Market Study For Fluid Lines & Cylinder Tubing.
- ☐ Market Study For Valve Solenoids.

From: APPLIED HYDRAULICS AND PNEUMATICS

Power Transmission

- ☐ A discussion of the markets for gears, speed reducers, bearings, couplings, clutches and other power transmission devices, #221D.

From: POWER TRANSMISSION DESIGN

Material Handling

- ☐ How Does Industry Buy Material Handling Equipment In Cleveland, #230F.
- ☐ Material Handling Reader Response Study, #163F.

From: MATERIAL HANDLING ENGINEERING

Office Products

- ☐ The Characteristics Of The Market For Office Equipment, #144M.

From: MODERN OFFICE PROCEDURES

Precision Castings

- ☐ Correlation Of Die Casting Sales To Inquiries, #174P.
- ☐ Precision Metal Molding Production Data Book for 1958, #143P.

From: PRECISION METAL MOLDING

Industrial Safety

- ☐ Market For Floor Cleaning Machines.
- ☐ Market For Safety Equipment.

From: OCCUPATIONAL HAZARDS

Welding

- ☐ A Study of 1093 Of The Nation's Leading Independent Welding Supply Distributors, #237W.
- ☐ Welding — Study Of Reader Buying Power, #189W.

From: INDUSTRY & WELDING

Marketing Department
THE INDUSTRIAL PUBLISHING CORPORATION
812 HURON ROAD · CLEVELAND 15, OHIO

A-18-59

(CLIP THIS AD AND MAIL WITH YOUR LETTERHEAD)

PENNSYLVANIA

Industrial Directory of the Commonwealth of Pennsylvania 1959

Published every three years by The Bureau of Publications, 10th and Market Streets, Harrisburg. (834 pgs.; $7.50).
Data: 1, 2, 4, 9, 11, 15, 16, 17, 18

RHODE ISLAND

Rhode Island Directory of Manufacturers and List of Commercial Establishments 1959

Published every three years by Rhode Island Development Council, Old R.I.-C.E. Bldg., Hayes St., Providence 2. (171 pgs.; $2).
Data: 1, 2, 3, 9, 11, 12, 15, 17

SOUTH CAROLINA

The Industrial Directory of South Carolina 1957 with 1959 Supplement

Published, with supplements at intervals, by South Carolina State Development Board, Columbia. (194 pgs.; $2.50).
Data: 8, 11, 15, 16, 17, 19, 20

SOUTH DAKOTA

Directory of South Dakota Industries 1959

Published biennially by South Dakota Industrial Development Expansion Agency (I.D.E.A.), State Office Bldg., Pierre. (120 pgs.; tentative price $2.50).
Data: 1, 4, 5, 7, 11, 15, 17, 19

TENNESSEE

Directory of Tennessee Industries 1957-58

Published approximately at three-year intervals by Tennessee Industrial and Agricultural Development Commission, 231 Cordell Hull Bldg., Nashville 3. (302 pgs.; $5).
Data: 1, 4, 5, 11, 12, 16, 17, 20

TEXAS

Directory of Texas Manufacturers 1959

Published annually by The Bureau of Business Research, The University of Texas, Austin 2. (500 pgs.; $10).
Data: 1, 5, 11, 12, 13 (to be added in 1960), 15, 16, 17, 18, 19, 20

UTAH

Utah Directory of Mining and Manufacturing 1959

Published (usually annually, depending on workload, etc.) by Utah Committee on Industrial & Employment Planning in cooperation with Utah Department of Employment Security, 174 Social Hall Ave., Salt Lake City 10. (100 pgs., free of charge).
Data: 1, 2, 3, 4, 5, 7, 11, 15, 16, 17, 18, 19, 20

VERMONT

Directory of Vermont Manufactured Products 1959-60

Published biennially by Vermont Development Commission, Montpelier. (101 pgs.; free of charge).
Data: 1, 2, 3, 4, 5, 11, 12, 14, 15, 18, 19, 20

VIRGINIA

Directory of Virginia Manufacturing and Mining 1959-60

Published annually by Virginia State Chamber of Commerce, 111 N. 5th St., Richmond 19. (175 pgs.; $6).
Data: 5, 7, 11, 12, 15, 16, 17, 18, 19, 20

WASHINGTON

Washington State Manufacturers' Directory 1956

Published by Washington State Employment Security Department in cooperation with the Washington State Industry Utilization Committee, Old Capitol Bldg., P. O. Box 367, Olympia. (310 pgs.; no charge. The 1956 edition is the last edition published; no current plans to publish another edition).
Data: 8, 11, 12, 14, 15, 17

WEST VIRGINIA

Directory of West Virginia Business & Industry 1953 plus supplement up to 1959

Published (No definite dates set for new editions.) by West Virginia Department of Labor, 643 State Office Bldg., Charleston. (455 pgs.; $5).
Data: 8, 11, 19, 20

WISCONSIN

Classified Directory of Wisconsin Manufacturers 1959

Published annually (usually Nov. 1) by Wisconsin Manufacturers Association, 633 N. Water St., Milwaukee 2. (943 pgs.; $14.50 paper-bound; $17.50 post-bound).
Data: 9, 11, 12, 13, 14, 15, 17, 19, 20

WYOMING

Directory of Manufacturing and Mining 1959

Published annually by Wyoming Natural Resource Board, 215 Supreme Court Bldg., Cheyenne. (60 pgs.; 50¢).
Data: 8, 11, 12, 13, 15, 17

Data Code: 1. SIC; 2. 2-Digit SIC; 3. 3-Digit SIC; 4. 4-Digit SIC; 5. 4-Digit SIC & Product Name; 6. Product Classification numbers other than SIC; 7. Product Classification Alphabetically with Numbers; 8. Product Classification Alphabetically no Numbers; 9. SIC Sequence no Numbers; 10. Other; 11. Number Employes; 12. Name of Official; 13. Capitalization; 14. Trade & Brand Names; 15. Alphabetical Listing; 16. Alphabetical Cross-Indexing; 17. Geographical Listing; 18 Geographical Cross-Indexing; 19. Product Classification Listed; 20. Product Classification Cross-Indexed.



IN BUFFALO...in the morning

MORE HOUSEWIVES ARE "GOING" OVER MORE ADS

Retailers know that women act on advertising in the Buffalo Courier-Express. Here are two of many figures that prove it.

—WOMEN'S STORES use 65.8% of their daily linage—74.1% of the total when Sundays are included—in Buffalo's fastest growing newspaper.

—The THREE LARGEST CHAINS which do well over half the area's food business, place half of their advertising in the Courier-Express.

AND IF YOU SELL MEN, wide leadership in such classifications as Men's Stores, Automobile Dealers, and Financial clearly point to the Courier-Express as the profitable newspaper to carry your sales messages.

FOR MORE ADVERTISING FOR YOUR DOLLAR concentrated on those with more dollars to spend—use the *Morning* Courier-Express. It reaches nearly half the families in ABC Buffalo—over one-third of all those in the rich 8-County Western New York Market.

FOR SATURATION—use the *Sunday* Courier-Express—the state's largest newspaper outside of Manhattan. It blankets the 482,108 families in Buffalo and the eight surrounding counties.

ROP COLOR AVAILABLE BOTH DAILY AND SUNDAY

Buffalo Courier-Express

Member: Metro Sunday Comics and Sunday Magazine Networks

Representatives: Scolaro, Meeker & Scott

Pacific Coast: Doyle & Hawley



Specialists in SIC Mailing Lists

Creative Mailing Service, the pioneer in the compilation of mailing lists by SIC number, now offers a complete market service based on the Standard Industrial Classification System.

The Standard Industrial Classification System is the most positive method of market selection yet developed. Creative Mailing Service has available 951 separate mailing lists — according to specific 4-digit SIC number.

These mailing lists represent the names and addresses of more than a million American business firms. All major industrial and commercial groups are represented, including manufacturers, contractors, service firms, retailers and wholesalers.

Creative offers these lists as mailing lists or prospect lists. They are available on sheets, labels, index cards or punched cards.

For every SIC code number Creative has a "prime" list of those firms whose principal product or service is represented by that number. Since each firm is represented by only one prime SIC number it is possible to use many SIC groups as a single list without fear of duplication.

As a plus service for those advertisers who want to saturate a specific market Creative also offers these SIC lists on a "total market" basis as well. Under this concept Creative will put together (1) the prime market, (2) branch locations, and (3) firms whose secondary product or service is covered by the indicated SIC code number. This technique offers both saturation and penetration of the market.

Creative has published a catalog which shows list names, SIC numbers, quantities of names on each list and list prices. Copies of this valuable advertising and marketing tool are available, without charge, on request.

Creative Mailing Service, Inc.

Mailing Lists · Addressing · Mailing

460 North Main Street, Freeport, N. Y. · Freeport 8-4830

From the Old to the New 1957 SIC

1958 Data by NEW Code Classification

Immediately following this article, SALES MANAGEMENT presents—in terms of the *new* SIC Codes to be used for the first time in the 1958 Census of Manufactures—estimates of 1958 employment and value of products shipped for every 4-digit industry in the 2-digit Major Groups.

In the sense that they will be directly comparable with the results of the '58 Census the estimates are a "preview" of the census.

By **HAROLD T. GOLDSTEIN**

Coordinator, Industry and Commodity Classification
Bureau of the Census

A new Standard Industrial Classification Manual (SIC) was issued by the U. S. Bureau of the Budget toward the end of 1957 replacing the previous edition (Vol. I — Manufacturing Industries, 1945, and Vol. II — Nonmanufacturing Industries, 1949).

If you have been using the old SIC for any purpose, you will be interested in knowing why and how it has been changed. The information in this article will help you make the transition from the old to the new basis. It discusses the structure of the SIC, the background for the present revision, summarizes the nature and extent of the changes, and highlights the principal elements of comparability between two systems.

The SIC was developed for use in the classification of establishments by types of activity in which they are engaged for purposes of facilitating the collection, tabulation, presentation, and analysis of data relating to establishments; and for promoting uniformity and comparability in the presentation of statistical data collected by various agencies of the United States Government, state agencies, trade associations, and private research organizations.

Business men engaged in marketing or production planning have been quick to recognize the value of a standard system of industry classifications. It is an important starting point for providing uniformly defined, comparable statistical data.

It is of course realized that standard definitions by themselves are not sufficient to guarantee strict comparability of industry data published by various agencies. Other factors that could contribute to differences have to be taken into account, such as variations in establishment units reported to each agency, codes assigned by each agency, information supplied by respondents to each agency, use of sampling techniques versus complete census coverage, etc. Continuing efforts are being made among the various government agencies, coordinated by the Budget Bureau, to resolve or minimize these differences. Nevertheless, the use of uniform definitions is an essential first step in achieving consistency and comparability of industry data and has gone a long way toward meeting this objective.

Industry data, further classified by such characteristics as location and size of establishment, can serve as a fountain of economic knowledge which can be utilized to provide answers to many of your marketing or production problems. They are helpful in evaluating your company's sales, costs, inventories, etc., in relation to those for the industry as a whole; locating markets for your products; establishing sales territories; determining plant or sales branch locations; selecting advertising media to yield optimum returns; and many other purposes.

Background

The Standard Industrial Classification, issued under auspices of the U. S. Bureau of the Budget, was first published in 1939. For the production, distribution and certain service trade industries, its roots were embedded essentially in the classifications of the U. S. Bureau of the Census, which has compiled censuses of agriculture, mining and manufactures for more than a century, and censuses of wholesale, retail and service trades since 1929. The 1939 SIC was revised in 1942 and then again in 1945 for manufacturing industries and in 1949 for non-manufacturing industries.

Further SIC revisions approved by the Bureau of the Budget were adopted in the 1954 Censuses of Business, Manufactures and Mineral Industries but the SIC manual was not re-issued at that time. Most of the SIC revisions used in the 1954 Censuses, as well as many other changes, were subsequently incorporated into the 1957 SIC edition.

The new (1957) SIC represents the results of the combined efforts of many persons in government and private industry. Committees of industry representatives organized by the Budget Bureau's Advisory Council on Federal Reports reviewed

every section of the old manual. They made recommendations for improving the classifications to the government Technical Committee on Industrial Classification sponsored by the Budget Bureau. Joint industry-government meetings were held to discuss and resolve the various problems or questions raised in the proposals for revision. Industry participation in the preparation of the 1957 SIC was probably more active, systematic and comprehensive than in any previous edition of the manual. Thus, the new SIC, to a very great extent is a combined industry-government product.

Principles of SIC

In establishing the industries in the 1957 SIC, the following general principles served as guides:

(1) The classification should conform to the existing structure of American industry.

(2) The units to be classified are establishments rather than legal entities or companies; and each establishment is to be classified according to its major activity.

(3) The group of establishments constituting the industry should be of significant size from the standpoint of number of persons employed, volume of business, and other economic features.

(4) The group of establishments should be homogeneous with respect to the type of activity in which they are engaged. Further, they should, in the aggregate, account for a significant portion of that activity.

Structure of SIC

The SIC was developed as a classification of establishments. The establishment is the economic unit which produces goods or services—for example, a farm, a mine, a factory, a store. The establishment is not necessarily identical with the business concern or firm which may consist of one or more establishments. Also it is to be distinguished from organizational departments or divisions within an establishment. Each establishment is assigned a single industry code on the basis of its major activity, which is generally determined by the product or group of products produced or handled, or services rendered.

A classification based upon establishments has certain inherent limitations. The establishment is too small a unit for the compilation of financial data such as profits and investments. On the other hand, it is too large a unit for measuring or describing the relationship of sales to employment, payrolls, capital expenditures, etc. for detailed products. It is also too large for measuring input-output relationships for captive (intra-plant) operations.

To overcome some of the deficiencies in the use of the establishment as a reporting unit, the 1954 Census of Manufactures provided a number of supplementary tabulations, such as Table 8 showing general industrial statistics (employment, cost of materials, shipments, etc.) by degree of establishment specialization for product classes within each industry, and Table 9 giving employment data on types of departmental operations within establishments for certain industries.

Primary emphasis in defining manufacturing industries in the SIC is on the supply side of the economic picture. Physical or technological structure and homogeneity of production are more important considerations than functional similarity between products and the ease with which one can be substituted for the other. Manufacturing industries are generally defined in terms of establishments primarily producing a group of related products. However, in some instances the determining factor is the process which the establishments perform, or the materials used, or the method of distribution.

The key factor on which the manufacturing classifications are based is the answer to the question "who makes the product?" rather than "who wants (demands) the product?" For this reason, establishments primarily manufacturing tin cans are classified in a different industry from those making glass containers, even though the uses or demands for tin cans and glass containers are closely associated. Technologically, however, establishments manufacturing tin cans are different from those making glass containers. They employ different materials, perform different operations, and use different facilities.

Similarly, establishments primarily manufacturing butter are in a different industry from those producing margarine, although the demands for both are quite similar.

For non-manufacturing segments of the economy (agriculture, fisheries, mining and construction) producing goods, emphasis is again centered on the nature of the output rather than the demand for the goods or services.

The SIC is a rather general purpose tool for measuring and describing characteristics of the various segments of the economy. In manufacturing, it usually groups plants with common input problems (similar materials, machinery, types of operations, labor skills, etc.) and similar outputs. In distribution it groups establishments with similar types of customers, operations and merchandise lines. In other segments, it aggregates establishments with similar facilities, labor requirements, etc., and performing the same kind of service or producing the same kind of product.

Although it is a general purpose industrial classification of establishments, the SIC cannot encompass all desired statistical objectives. In basic arrangement and detail it may not be ideally suited to all types of economic analyses, and these limitations of the data must be carefully considered.

Cross-Classification

One cannot depend entirely on the use of SIC as is, for example, to obtain industrial data distinguishing consumers' goods from producers' goods, or durable from nondurable goods, or for measuring the nation's industrial capacity in conversion to defense production, or for determining the extent of industrial concentration in the production of certain commodities. However, the SIC does contain a large number of industry building blocks, which must sometimes be rearranged, cross-classified, selected or otherwise adapted to serve particular uses. It must often be supplemented and sometimes supplanted by data based on other classification systems.

For example, the Census Bureau has developed a tentative industrial classification for enterprises or companies, as distinct from establishments, in presenting data on industrial diversification from reports in the 1954 Censuses of Business, Manufactures and Mineral Industries. The classification of enterprises presents new problems and, in fact, should perhaps be developed differently for different purposes. The Bureau modified and adapted the SIC to suit the company, as distinguished from establishment industrial, characteristics.

The SIC is an industrial classification of the total economy. It divides all activities into broad industrial divisions, subdivides each division into 2-digit major groups, breaks the major groups into 3-digit industry subgroups, and further divides the latter into 4-digit detailed industries.

The numbering system provides flexibility by permitting use of classifications at various levels of detail (4-digit, 3-digit, 2-digit, division) according to the specific uses desired.

The only magazine published exclusively to serve the specialized job responsibilities of the men in charge of

Plant Engineering and Plant Maintenance



1958 PLANT ENGINEERING Editorial Breakdown by Subjects

	Percent
Distribution and use of Electricity	7.4
Illumination, Alarm and Public Address systems	7.3
Mechanical Power Transmission	2.8
Air Conditioning, Ventilation, Heating, Boilers	7.4
Piping and Accessories	4.4
Compressors, pumps, prime movers	4.4
Material Handling Equipment	8.3
Construction, maintenance, design, layout, and planning of buildings, grounds, equipment	12.3
Equipment maintenance, repair and installation	6.5
Tools and welding, special processes	3.9
Paints and protective coatings	4.8
Safety, sanitation and personnel services	3.6
Water supply, treatment, waste disposal, scrap	5.0
Lubrication and fuels	2.6
Instruments, measurement and control	4.0
Maintenance methods, planning, management	15.3
	100.0

Write for new Comparison Chart showing PLANT ENGINEERING's balanced editorial coverage of major product areas.

S.I.C. Two-Digit Listing of Circulation and Plant Units Reached in the Manufacturing Industries—Aug., 1958

	Circulation	Plants
19 Ordnance and Accessories	138	98
20 Food and Kindred Products	4,441	3,847
21 Tobacco Manufacturers	175	150
22 Textile Mill Products	2,692	2,403
23 Apparel and Other Finished Fabric Products	883	862
24 Lumber and Wood Products	1,373	1,286
25 Furniture and Fixtures	1,069	979
26 Paper and Allied Products	2,596	1,922
27 Printing, Publishing and Allied Industries	633	524
28 Chemicals and Allied Products	4,131	3,031
29 Products of Petroleum and Coal	1,068	653
30 Rubber Products	656	432
31 Leather and Leather Products	1,245	1,199
32 Stone, Clay and Glass Products	1,705	1,343
33 Primary Metal Industries	4,096	2,771
34 Fabricated Metal Products	5,337	4,800
35 Machinery	6,285	5,231
36 Electrical Machinery, Equipment and Supplies	2,823	2,085
37 Transportation Equipment	2,639	1,699
38 Professional, Scientific & Control Instruments	749	599
39 Miscellaneous Manufacturing Industries	1,203	1,090
10-14 Mining	1,022	870
15-17, 89 Engineering, Architectural & Construction Services	1,701	1,411
40-49 Transportation, Communication and other Utilities	561	458
Service Establishments: Government, Retail & Wholesale Trade, Finance, Insurance, Real Estate, Not Analyzed	2,078	.....
TOTAL	51,299	39,743

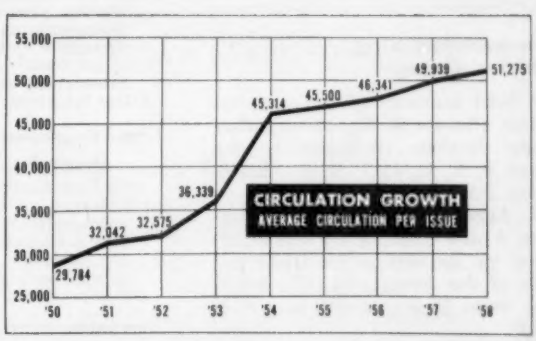
Available MARKET DATA . . .

1958 Heating, Air Conditioning, Ventilating Study
Covers brand preferences for 57 types of equipment in this field.

1958 Electrical Products Brand Preference Study
Covers brand preferences for 79 types of materials and equipment in this field.

Profile: The American Plant Engineer
(published by AIPE)
Describes the Plant Engineer: Who he is, Where he works, What he does.

Plant Engineering Today
Gives information on current status of the plant engineering and maintenance functions and the Plant Engineering Department's responsibilities for maintenance, utilization, and purchase of major categories of plant service equipment and materials.



Sell the PLANT ENGINEER and You've Sold Your Product

PLANT ENGINEERING is the only magazine edited and distributed exclusively for the plant engineering function in all manfacturing industries. By pin-point process, it selects your No. 1 buying influences on plant equipment and materials for providing plant production services. You make direct contact with your best prospects. These are the very men your salesmen must sell.

BPA NBP

Plant Engineering

TECHNICAL PUBLISHING CO. 308 EAST JAMES ST., BARRINGTON, ILL.

Sell the PLANT ENGINEER and You've Sold Your Product

The U. S. censuses of manufactures, mining, wholesale, retail and service trades utilize the classification at the most detailed level (4-digits) and in some instances provide industry or kind-of-business breakdowns below the 4-digit classification, particularly in the case of wholesale trade classifications.

Analysis of SIC Changes

In general, the basic structure and composition of the 1957 SIC is similar to that of the previous edition. The 1957 revision, to be used for the first time in the 1958 Census, attempted to bring the classifications up to date, by recognizing new or growing industries, eliminating economically insignificant ones, and improving the homogeneity and coverage of existing industry classifications.

Although attention was paid to revisions at the broader 3-digit and 2-digit levels, greater emphasis was directed at improvements in the basic 4-digit industries. Closer examination of the structural balance at the 2- and 3-digit levels would appear to be warranted in future revisions of the manual.

A revision affecting all divisions of the SIC deals with the classification of central administrative offices and auxiliary units such as warehouses, research laboratories, garages, etc., serving the various establishments of a company. Such establishments are assigned codes based on the 2-digit major group of the establishments served; the third digit is zero and the fourth digit identifies the type of unit (central office, warehouse, etc.).

Non-manufacturing Industry Changes

A brief summary of the more important changes in the non-manufacturing divisions (indicated by the letters A, B, C, etc.) of the classification follows:

A. **Agriculture, Forestry and Fisheries.** A new major group was established for non-commercial farms and some of the commercial farm industries were broken down into finer detail.

B. **Mining.** A number of consolidations of small industries was the principal change from the old SIC.

C. **Contract Construction.** None.

E. **Transportation, Communication and Other Public Utilities.** A number of rearrangements were made in transportation industries. In addition to those services allied to transportation previously included in this division, the following have been added from the Services division: aircraft repair, automotive repair for passenger transportation, and contract mail carriers. Also, Radio and TV Broadcasting (1949 SIC Major Group 77) was added to Major Group 48, Communications.

F. **Wholesale Trade.** Wholesale Trade (Division F) was merged with Retail Trade (Division G) into one division. The two Major Groups 50 and 51 for this division in the old SIC were combined into one. The former distinction between (1) Merchant wholesalers, and (2) Other wholesalers—manufacturers' sales branches, merchandise agents and brokers, petroleum bulk plants and assemblers of farm products, was eliminated. Thus, all wholesalers in the new SIC are distinguished only in terms of the merchandise lines handled. However,

Summary of Changes—1945 SIC to 1957

1. The 1957 SIC has 926 four-digit industries in 75 two-digit major groups in 9 divisions as compared with the old SIC, which had 1,015 four-digit industries in 77 two-digit major groups in 10 division. The smaller number of divisions in the 1957 SIC is accounted for by the combination of wholesale and retail trade into one.

2. Of the 1,015 old SIC industries, a total of 485 industries remained the same both in code number and definition, 68 had the same definitions but different code numbers, 300 were affected by changes in definition or scope (134 with same code number), and 162 were split into two or more whole industries or parts of industries.

3. A measure of the significance of the changes in terms of number of employes reported in the 1954 Censuses of Business, Manufactures and Mineral Industries, is shown below.

Industry segment	Total	Same definition		Different definition	
		Same code	Different code	Old industry not split[1]	Old industry split[2]
Number of industries	1,015	485	68	300	162
1954 Census scope	772	301	51	290	150
Mining	71	35	1	27	8
Manufacturing	469	153	42	167	107
Wholesale trade	76	...	1	50	25
Retail trade	81	68	3	7	3
Selected services[3]	75	45	4	119	7
Other industries	243	184	17	30	12
1954 Employment (thous.)	†55,949	n. a.	n. a.	n. a.	n. a.
1954 Census scope	‡28,585	12,381	1,244	7,086	7,874
Mining	766	401	68	205	92
Manufacturing	15,459	5,278	869	3,841	5,471
Wholesale trade	2,746	...	133	1,287	1,326
Retail trade	7,253	5,604	109	1,199	341
Selected services	2,361	1,098	65	554	644
Other industries	27,364	n. a.	n. a.	n. a.	n. a.

n.a. Not available.

[1] Additions made to old industries or old industry merged with another industry.

[2] Old industry divided into two or more whole industries or parts. For manufacturing includes 42 industries (with 992,000 employes) which were split into 2 parts, but the splits were of negligible importance.

[3] Covers 1949 SIC codes 701, 703, 72, 73 except 737, 75, 76, 78 and 79.

† Average 1954 employment for mining and manufacturing; for work week nearest November 15, 1954, for other industries.

‡ Excludes number of employes in central administrative offices and auxiliaries, which for 1954 Census scope industries totaled over 800,000 and is included in figure for "other industries."

WHEN CONSIDERING BUILDING PUBLICATIONS

CONSIDER THESE FACTS . . .

THE MEN WHO SELL BUILDING PRODUCTS*

FIND ALL FOUR BUILDING TEAM MEMBERS IMPORTANT IN THE SPECIFICATION, SELECTION, AND PURCHASE OF BUILDING PRODUCTS . . .

TEAM MEMBERS	NO.	PERCENT
Architect	544	69.7%
Engineer	379	48.6%
Contractor	345	44.2%
Building owner or his rep.	229	29.4%

AND VOTE ARCHITECTURAL FORUM THE MOST IMPORTANT MAGAZINE TO THE BUILDING TEAM—YOUR CUSTOMERS IN THE BUILDING FIELD . . .

MAGAZINES	NO.	PERCENT
Architectural Forum	362	46.4%
Architectural Record	236	30.3%
Progressive Architecture	146	18.7%

CONSIDER ALSO THESE REASONS FOR FORUM's LEADERSHIP IN THE BUILDING FIELD . . .

- The largest circulation in the field—over 59,000
- The biggest architectural circulation growth
- Reaches the greatest number of contractors and building clients
- The only magazine to reach all four team members—architects, engineers, contractors, and building clients
- The first choice of 15 of the top 25 building product advertisers
- The lowest cost per thousand circulation

IF IT BELONGS IN BUILDING — IT BELONGS IN **FORUM**

Architectural Forum / The Magazine of Building / Published by Time Inc.



*SOURCE: 780 salesmen—building dealers, distributors, sales representatives, agents, jobbers, etc.—for 25 major building products and equipment manufacturers. If you wish to see a copy of this mail poll, contact the FORUM sales representative in your area.

Some of the More Important New Industries Created by Code Change

1957 SIC code	NEW INDUSTRIES CREATED	Est. 1954 Employ't (000s)
2032	Canned specialties	31
2211	Cotton broad-woven fabric mills	296
2221	Man-made fiber and silk broad-woven fabric mills	90
2261	Finishing cotton broad-woven fabrics	55
2262	Finishing man-made fiber and silk broad-woven fabrics	11
2269	Finishing textiles, except wool, n. e. c.	13
2281	Yarn mills—cotton, man-made fibers and silk	70
2283	Yarn mills, wool (including carpet wool)	25
2296	Tire cord and fabric	15
2328	Work clothing	52
2426	Hardwood dimension and flooring mills	28
2441	Nailed wooden boxes	32
2442	Wirebound boxes and crates	12
2541	Wood partitions and fixtures	15
2542	Metal partitions and fixtures	18
2621	Paper mills, except building paper	97
2631	Paperboard mills, except building paperboard	45
2651	Paperboard boxes, folding	42
2652	Paperboard boxes, set-up	28
2653	Corrugated and solid fiber boxes	62
2654	Sanitary food containers	24
2761	Manifold business forms	36
2823	Cellulose man-made fibers	45
2824	Synthetic organic fibers, except cellulose	16
3271	Concrete block and brick	27
3315	Steel wire drawing	18
3316	Cold rolled sheet, strip and bars	15
3357	Nonferrous wire drawing and insulating	54
3361	Aluminum castings	33
3362	Copper and brass castings	18
3392	Nonferrous forgings	5
3431	Metal sanitary ware	14
3432	Plumbers' brass goods	17
3441	Fabricated structural steel	75
3449	Architectural metal work	41
3522	Farm machinery (including farm and garden tractors)	109
3531	Construction machinery (incl. construction tractors)	90
3532	Mining machinery	14
3542	Machine tools, metal forming types	27
3544	Special dies and tools	86
3545	Machine tool accessories	45
3565	Industrial patterns	11
3581	Automatic merchandising machines	6
3585	Refrigeration equipment, except household	74
3591	Machine shops, jobbing and repair	100
3599	Machinery & parts, n. e. c.	100
3613	Switchgear and switchboard apparatus	53
3622	Industrial electric controls	27
3631	Household cooking equipment	22
3632	Household refrigerators & freezers	52
3643	Current-carrying wiring devices	24
3644	Non-current-carrying wiring devices	19
3651	Radio and TV receiving sets	87
3662	Radio and TV transmitting, signaling apparatus	110
3671	Radio and TV receiving tubes, except cathode ray	37
3672	Cathode ray tubes	15
3673	Transmitting, industrial electron tubes	15
3679	Electronic components	111
3791	Trailer coaches	10
3822	Automatic temperature controls	25

in the 1958 Census of Wholesale Trade, the various types of wholesale operations will be shown for each of the merchandise line kinds of business. A number of important transfers were made from wholesale trade to manufacturing; namely, milk pasteurizers, fresh fish packagers, apparel and leather tanning jobbers and ready-mix concrete plants. These changes shifted to manufacturing an aggregate of approximately 9,000 establishments with over 200,000 employes in 1954 to manufacturing.

G. **Retail Trade.** Retail and wholesale trade divisions were combined. Milk pasteurizers distributing at retail (5,000 plants with over 100,000 employes in 1954) were transferred to manufacturing. The principal revision within retail trade was the creation of separate industries in Major Group 53, General Merchandise, for certain retail establishments (mail order houses, direct selling organizations and vending machine operations). In the old manual, these establishments were classified with store type establishments in the various kinds of business according to the merchandise handled.

H. **Service Trades.** See Division E above. Accounting, Auditing and Bookkeeping services (approximately 80,000 employes) were shifted from Major Group 73, Business Services, to Major Group 89, Miscellaneous Services. Machine shop repair establishments (estimated 2,000 establishments with 10,000 employes) were transferred to Manufacturing, where they had been in the 1939 SIC. Tire retreading, for the trade (about 1,000 employes), which was in Manufacturing, was added to Services in the new SIC.

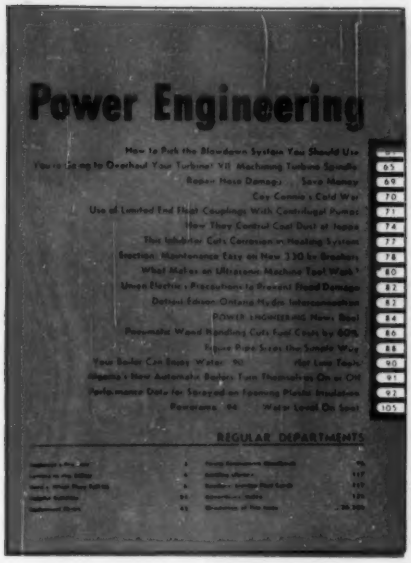
J. **Government.** The classification for Government, Major Group 90 in the 1949 SIC, was replaced by four 2-digit major groups for federal, state, local and international government establishments respectively, with a breakdown of industries within each group along the lines of the 2-digit major groups in the private industry sector of the classification, Major Groups 01-89.

Analysis of Manufacturing Industry Changes

The 1945 SIC had 469 four-digit manufacturing industries in 21 two-digit major groups (15.5 million employes in operating establishments and 500,000 employes in central administration offices and auxiliary establishments in 1954 Census of Manufactures). The 1957 SIC has 433 four-digit industries in 21 major groups.

Of the 469 SIC industries in 1945, 195 industries (6.1 million employes in operating establishments in 1954) had the same definition, 167 industries (3.8 million employes) were merged with other industries or their scope was changed, and 107 industries (5.5 million employes) were split into two or more whole 1957 SIC industries or parts of industries. The last group of 107 industries includes 42 industries (992,000 employes) for which the breakdowns by the 1957 SIC were of negligible importance.

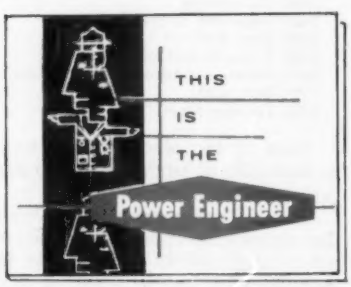
The 1957 SIC added approximately 326,000 employes (1954 data) to the scope of manufacturing industries from non-manufacturing classifications. Accretions to manufacturing from trade industries consisted of milk pasteurizing plants (191,000 employes), fresh fish packages (4,000 employes), apparel and leather tanning jobbers (85,000 employes) and ready-mix concrete plants (36,000 employes). Machine shop repair establishments (from serv-





Equipment Responsibility Study

In an editorial questionnaire, we asked power engineers to check a list of products to find out the extent of the power engineers' specifying and buying authority . . . also what equipment was bought in the past year. This information is tabulated by products in a 40-page study. Send for your copy . . . use it to help determine the sales potential for your product in the power enginering market.



This study features interviews with 18 power engineers in as many diversified industries. It defines the power engineer's function and his importance to you in your marketing concept. Write for your copy.

POWER ENGINEERING covers engineers regardless of title, having job interest or responsibiilties in the field of power generation, transmission, distribution and utilization in public and private utility plants, manufacturing industries, process industries, mining industries and service establishments such as buildings, laundries, hotels, hospitals, etc. Power service includes steam, electricity, air conditioning and refrigeration, compressed air, gas, hot and cold water.

POWER ENGINEERING PLANT COVERAGE

Percentage of plants generating electricity	44%
Median electric generating capacity of plants	2500 kw
Percentage of plants generating steam	80%
Median steam generating capacity of plants	80,000 lbs.

1958 Editorial Breakdown by Subjects

	Per cent
Complete Installation Articles and Power Plant Design	14.90
Diesel Engines and Gas Turbines	2.11
Steam Turbines and Engines, Condensers and Heat Exchangers, Cooling Towers	6.62
Electrical Transmission and Distribution, Motors and Generators	10.57
Lubricants and Lubrication	0.94
Refrigeration and Air Conditioning	3.94
Pumps and Compressors	3.02
Management, Training, Procedures and Methods	6.95
Construction, Maintenance and Repair, Mechanical Power Transmission, Fire Prevention and Safety	12.70
Instruments, Controls, Regulators, Records, Costs	6.96
Boilers and Accessories	4.83
Fuels & Firing Equipment, Coal & Ash Handling, Fans & Dust Collectors	7.45
Steam Accessories	1.05
Hydroelectric Power	1.52
Water Treatment and Waste Disposal	4.99
Piping and Valves	4.83
Atomic Energy	6.62
TOTAL	100.00

S.I.C. Two-Digit Listing of Circulation and Plant Units Reached — July 1958

	Circulation	Plants
Mining	1,028	829
Food and Kindred Products	3,286	2,870
Textile Mill Products and Apparel	1,362	1,148
Lumber and Wood, Furniture and Fixtures	988	882
Paper and Allied Products	1,670	1,029
Chemicals and Allied Products	2,318	1,569
Products of Petroleum and Coal	998	593
Rubber Products, Leather and Leather Products	595	452
Stone, Clay and Glass Products	680	548
Primary Metal Industries	2,212	1,287
Fabricated Metal Products	1,449	1,180
Machinery	1,777	1,294
Electrical Machinery, Equipment & Supplies	845	596
Transportation Equipment	1,004	601
Miscellaneous Manufacturing Industries	914	728
Transportation, Warehousing, Communication	1,124	912
Heat, Light, Power, Water & Sanitary Services	8,526	5,917
Retail Trade, Office & Manufacturing Tenant Buildings	900	847
Hotels	2,269	2,261
Laundries, Dry Cleaners, Amusement Services	1,052	1,040
Hospitals, Medical and Health Services	3,264	3,178
Educational Services	1,286	1,138
Engineering and Construction	2,410	1,505
Not analyzed by plant units:		
Government, Sales and Distribution	632	.....
TOTAL	42,589	32,404

BPA NDP

Power Engineering

The specialized magazine reaching/selling the power specialists

Technical Publishing Co., 308 East James St., Barrington, Ill.

The POWER ENGINEERING Market

The More Important Shifts Between Major Groups

From 1945 SIC	To 1957 SIC	Item	1954 Av. No. employees (000s)
22	23	Hats and hatters fur	13
	39	Hard surface floor coverings	10
25	24; 34	Window and door screens	4
	38	Professional furniture	6
28	20	Vegetable and animal oils	37
29	33	Coke ovens	33
34	35	Commercial cooking equipment, except electric	4
	36	Household cooking equipment, except electric	16
		Lighting fixtures	45
35	34	Fabricated pipe and fittings	13
		Valves and fittings (except plumbers')	75
		Heat exchangers (except refrigeration)	9
		Mechanical stokers	1
	36	Household laundry equipment	22
		Sewing machines	12
		Household vacuum cleaners	8
		Household refrigerators	52
		Dishwashers, waste disposals	4
	39	Coin operated amusement machines	4
36	33	Insulated wire and cable	14
	35	Turbogenerator sets	24
		Heating units, industrial electrical	1
		Commercial cooking equipment, electric	2
	38	Hearing aids, electric	1
39	24	Cork products	2
	28	Fireworks and pyrotechnics	3
	30	Fabricated plastics products	92
	31	Jewelry cases	8
	35	Industrial patterns & molds	20
		Soda fountain and bar equipment	1

ice trades in old SIC) added another 10,000 employes to manufacturing.

Within 2-digit manufacturing major goups, the principal types of changes from the 1945 to 1957 SIC can be categorized as:

1. Creation of new 1957 SIC industries as breakdowns of larger 1945 SIC classifications. (See page 58).

2. Elimination of small industries by merging them with appropriate other industries, often of the residual "not elsewhere classified" type within a 3-digit SIC group; and

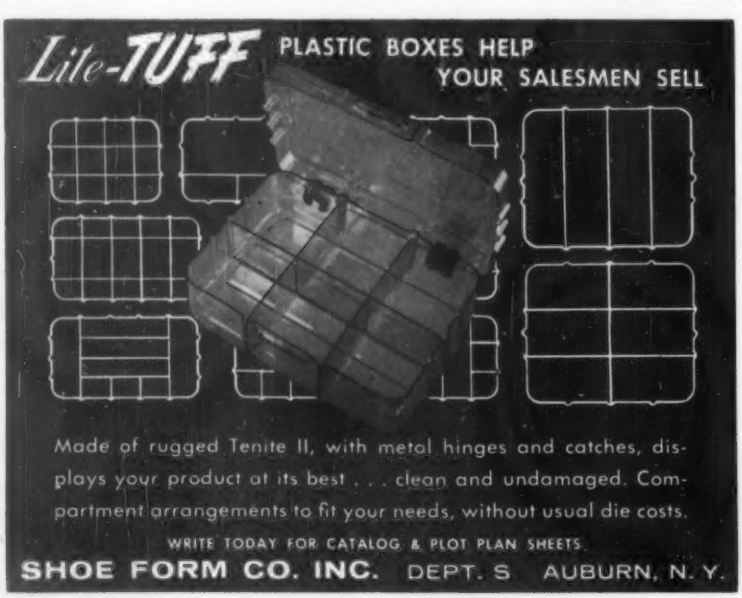
3. Shifts of establishments manufacturing specified products to other industries (See table above).

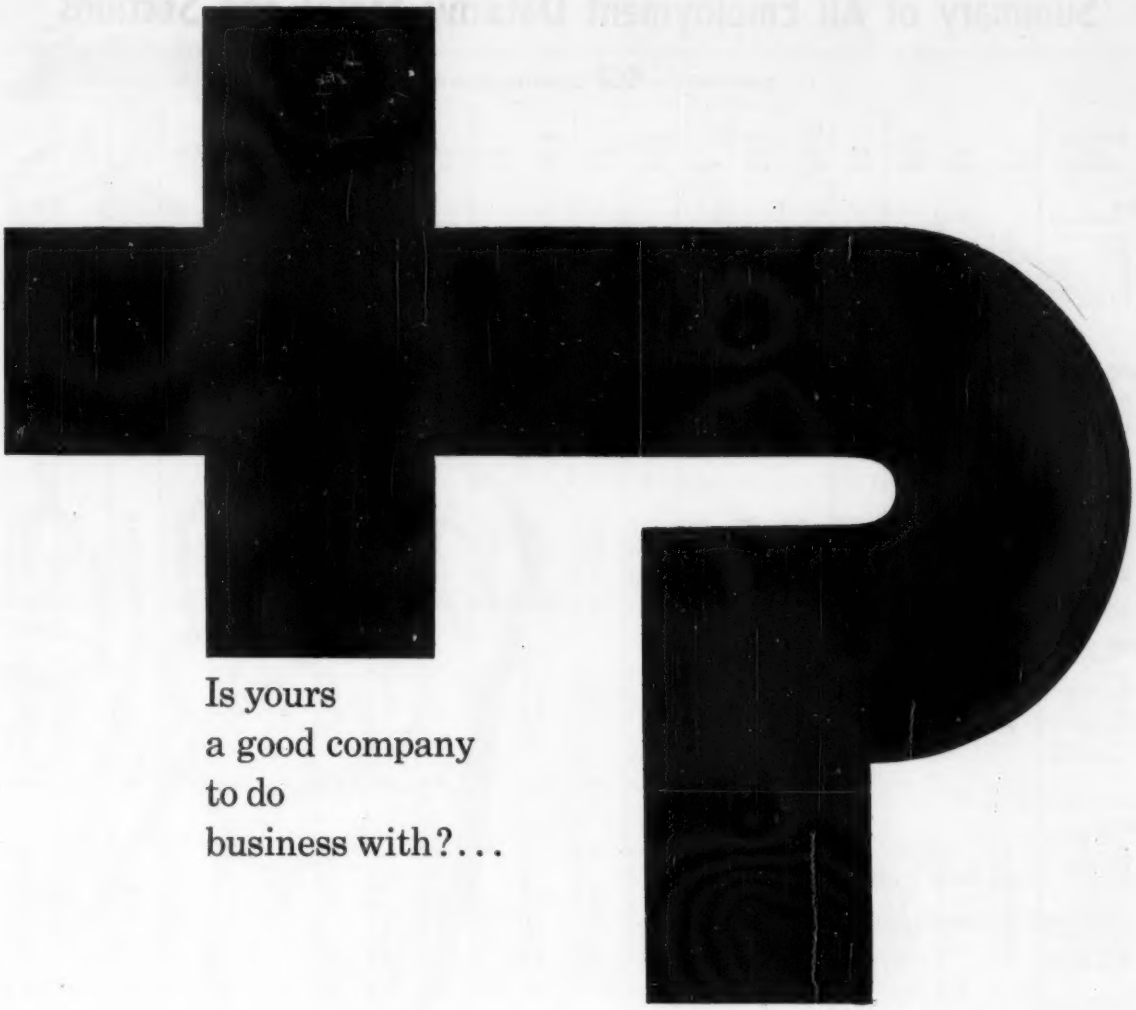
A large number of small industries were eliminated by merging with another appropriate industry. A list of those shifted to residual "not-elsewhere classified" industries is shown below. It does not include many industries combined into larger classifications which are not of the residual type, such as the merger into Industry 3931, Musical Instruments, of 1945 SIC Industries 3931-Pianos, 3932-Organs, 3933-Piano and Organ Parts, and 3939-Musical Instruments, n.e.c.

2091 Leavening compounds
2096 Vinegar and cider
2255 Knit glove mills
2296 Linen goods
2297 Jute goods
2338 Women's neckwear
2383 Suspenders and garters
2388 Handkerchiefs
2423 Shingle mills
2424 Cooperage stock mills
2425 Excelsior mills
2442 Rattan and willow ware
2492 Lasts
2493 Mirror and picture frames
2513 Reed and rattan furniture
2591 Restaurant furniture
2811 Sulfuric acid
2892 Essential oils
2898 Salt
2991 Fuel briquets and packaged fuel
3192 Saddlery, harness and whips
3265 China decorating for the trade
3296 Sand lime brick and block
3298 Statuary and art goods
3335 Primary refining of magnesium
3465 Enameling, japanning, lacquering metals
3466 Galvanizing
3467 Engraving on metal
3982 Cork products
3985 Fireworks and pyrotechnics
3991 Beauty and barber shop equipment
3994 Hair work
3996 Tobacco pipes

Most of the other changes represented shifts of establishments to more appropriate industries.

Then follows a complete conversion for manufacturing industries showing what happened to each of the 469 industries in the 1945 SIC as a result of the 1957 revision. It provides a measure of the effect of the revision by showing number of employes (average 1954) in each 1945 SIC industry or estimated number of employes in instances where the 1945 SIC was broken down into two or more parts. By adding each of the parts of the 1957 SIC industries, estimated total 1954 employment can be compiled for each of the 433 industries in the 1957 SIC.





Is yours
a good company
to do
business with?...

or only
fair
to do
business with?

You know the answer. But what about your customers and prospects? What do they think? Furthermore, what does your advertising encourage them to think? Does it contribute to the idea that yours is a good company to do business with? Naturally the magazine in which your advertising appears can contribute measurably to the total impression that readers get. For the impact of every advertisement is modified or magnified by its setting. What *additional* impact magazines add—*and how much*—has now been determined through a technique sponsored by Fortune. Ask your Fortune representative to show you the results of this pioneering effort in qualitative research. The study was done by Social Research, Inc. A film presentation of the findings, "FORTUNE AT WORK," runs 30 minutes . . . and finally *proves* what you suspected all along.

FORTUNE

New York / Boston / Chicago / Cleveland / Detroit / Los Angeles / Philadelphia / Pittsburgh / St. Louis / San Francisco

Summary of All Employment Data by States and Sections

EMPLOYMENT — SM ESTIMATES, 1958 (in thousands)

SECTIONS and STATES	Food	To-bacco	Tex-tile Mill	Ap-parel	Lum-ber (exc. furn.)	Furn. and Fixt.	Paper	Print'g and Publ.	Chem-ical	Petr. and Coal	Rub-ber	Leath-er	Stone, Clay, Glass	Prim. Metal	Fabr. Metal	Mach. (exc. elec.)	Elec. Mach.	Trans. Equip.	In-stru-ments	Total
NEW ENGLAND																				
Connecticut	9.3	.2	17.6	15.7	1.2	4.6	7.3	14.5	10.7	.4	12.4	2.3	4.6	23.5	45.4	61.9	27.5	76.8	15.3	331.8
Maine	13.4	—	14.1	2.8	14.2	.7	16.9	2.1	.6	—	.1	20.4	.8	.3	2.3	3.5	.7	3.4	—	97.4
Massachusetts	38.9	.2	50.0	58.0	4.8	10.6	34.7	38.3	17.4	1.3	22.2	57.8	9.4	16.1	32.9	63.7	72.2	25.0	16.2	612.7
N. Hampshire	2.1	.2	12.3	2.7	4.8	1.5	7.2	3.0	.4	—	.5	19.6	1.4	.6	1.8	6.2	7.8	—	.3	74.4
Rhode Island	3.9	—	29.2	4.0	.4	.6	1.8	3.9	1.4	.3	4.9	.7	1.5	4.8	6.6	9.8	6.0	1.0	2.6	110.9
Vermont	3.6	—	1.1	2.2	4.0	1.3	2.4	1.5	.2	—	.7	.5	3.1	.5	.9	6.8	.8	—	.3	32.7
	71.2	.6	124.3	86.4	29.4	19.3	70.3	63.3	30.7	2.0	40.8	101.3	20.8	45.8	89.9	151.9	115.0	106.2	34.7	1,319.9
MIDDLE ATLANTIC																				
New Jersey	54.3	1.5	33.6	71.3	4.5	9.1	26.6	28.6	84.5	10.0	12.9	11.9	28.4	32.6	44.3	67.7	93.8	46.8	24.4	726.5
New York	134.2	1.1	55.1	344.3	15.6	34.9	64.4	167.4	76.9	10.6	8.3	56.4	37.8	61.5	111.7	145.3	130.2	90.2	89.7	1,794.7
Pennsylvania	93.7	10.2	82.9	165.6	11.4	22.1	37.2	65.1	51.7	25.5	13.5	30.8	59.2	223.3	96.1	118.6	95.9	52.7	24.9	1,325.7
	282.2	12.8	171.6	581.2	31.5	66.1	128.2	261.1	213.1	46.1	34.7	99.1	125.4	317.4	252.1	331.6	319.9	189.7	139.0	3,846.9
EAST NORTH CENTRAL																				
Illinois	127.5	.5	9.1	46.4	11.5	28.1	29.1	94.1	45.7	12.9	5.7	18.8	33.7	84.0	112.2	186.8	128.5	35.5	27.4	1,096.0
Indiana	42.9	.6	1.9	12.0	6.7	21.5	11.5	19.8	22.8	9.9	14.1	2.0	22.7	83.1	40.6	54.3	54.4	63.0	3.8	529.2
Michigan	52.2	.5	2.7	6.4	10.1	19.3	27.4	27.9	37.7	3.7	12.3	3.9	16.2	62.4	77.3	126.6	29.9	309.6	8.3	858.9
Ohio	66.5	1.1	10.1	24.1	7.8	18.3	36.1	57.2	57.8	9.8	74.8	11.4	59.5	166.1	116.4	202.2	74.2	131.5	8.4	1,166.6
Wisconsin	68.7	.6	6.1	7.2	14.2	8.2	33.4	21.5	5.5	.9	4.6	15.9	4.4	22.5	30.2	90.5	34.2	28.4	3.6	401.7
	357.8	3.3	29.9	96.1	52.3	95.4	137.5	220.5	169.5	37.2	111.5	52.0	136.5	408.1	376.7	660.1	320.2	588.0	51.3	4,044.4
WEST NORTH CENTRAL																				
Iowa	48.9	—	7.0	4.3	4.8	2.2	7.2	11.8	5.8	.1	3.5	7.0	5.1	5.2	6.2	38.9	8.8	3.5	1.8	160.7
Kansas	20.4	—	—	3.4	1.0	.7	1.9	8.2	5.7	4.1	1.5	.1	5.3	1.1	4.6	8.1	7.6	42.1	.1	118.2
Minnesota	56.1	—	2.2	7.9	7.1	2.5	11.7	18.6	8.2	1.2	.8	1.9	13.8	5.8	11.7	28.8	6.4	4.5	10.7	215.1
Missouri	49.9	.6	3.0	34.9	6.9	6.9	11.2	25.0	19.9	2.5	.8	34.8	12.4	11.6	24.3	21.9	28.7	45.2	2.8	364.6
Nebraska	26.8	—	—	1.5	1.0	1.1	.5	5.1	1.7	.1	.9	.1	1.3	3.8	2.5	5.4	4.1	1.2	.3	63.4
North Dakota	3.3	—	—	—	—	—	—	1.4	—	.1	—	—	.4	—	.2	.2	—	—	—	5.8
South Dakota	7.9	—	—	—	.9	.1	—	1.5	.1	—	—	—	.4	—	.5	.4	.2	—	—	12.1
	213.3	.6	12.2	52.0	21.7	13.5	32.5	71.4	39.4	8.1	7.5	43.6	38.7	27.5	50.0	103.7	55.8	96.5	15.7	959.9
SOUTH ATLANTIC																				
Delaware	6.6	.1	2.3	3.9	1.0	.1	.7	1.0	6.4	.1	5.7	1.8	.5	3.5	1.3	2.5	.1	2.6	.2	41.8
Dist. of Col.	5.0	—	—	.2	.1	.3	.6	11.4	.2	—	—	—	.2	—	.4	.1	.3	—	.1	19.1
Florida	26.8	6.0	.4	7.7	13.9	6.9	12.7	13.6	14.1	.3	.3	.5	10.1	.8	13.1	4.9	5.8	10.2	.3	150.6
Georgia	37.1	.6	93.0	41.2	27.1	7.6	15.5	9.0	9.3	.4	.5	3.4	8.5	3.7	5.8	7.1	2.3	23.2	.1	299.0
Maryland	33.3	.1	6.2	22.9	5.0	5.5	8.1	12.3	10.5	2.7	6.2	2.5	7.9	37.7	13.7	10.2	10.6	43.3	1.5	251.2
North Carolina	24.4	34.2	206.4	27.5	29.2	38.0	11.4	6.7	11.7	.1	1.2	1.2	6.6	1.6	6.9	8.1	18.4	4.5	.9	442.8
South Carolina	8.2	1.2	119.6	9.7	16.0	3.3	7.0	3.4	12.7	.2	—	.1	5.1	.5	1.2	3.2	.7	.4	.1	193.3
Virginia	38.3	10.8	32.2	21.9	17.3	16.9	11.3	9.1	30.4	.2	1.1	5.1	7.1	5.2	7.8	2.4	.6	16.9	1.4	236.2
West Virginia	8.0	.9	2.0	3.6	6.1	1.1	1.6	3.7	25.7	2.1	.2	.8	20.0	20.7	7.4	3.7	3.9	1.3	.3	114.3
	187.7	53.9	462.1	138.6	115.7	79.7	68.9	72.2	121.0	6.1	15.2	15.4	66.0	73.7	57.6	42.2	42.7	102.4	4.9	1,750.3
EAST SOUTH CENTRAL																				
Alabama	17.2	.6	39.7	22.2	23.4	1.9	9.6	5.4	9.8	2.5	5.5	.4	7.7	39.5	10.5	6.0	2.2	13.5	.1	219.9
Kentucky	26.6	9.7	2.6	17.5	9.9	5.9	1.6	8.3	10.7	1.8	.2	2.1	4.5	7.3	9.6	23.5	8.6	5.4	.6	159.5
Mississippi	11.6	—	3.6	25.4	10.0	5.2	8.2	2.6	4.9	.2	.9	.2	3.4	1.2	2.9	2.5	2.9	13.4	.1	105.6
Tennessee	26.3	.9	30.4	39.1	17.2	12.5	8.1	13.9	43.1	.7	3.9	12.3	9.6	12.0	19.1	9.1	9.1	3.7	3.8	283.7
	81.7	11.2	76.3	104.2	60.5	25.5	27.5	30.1	68.5	5.2	10.5	15.0	25.2	60.0	42.1	41.1	22.8	36.0	4.8	771.7
WEST SOUTH CENTRAL																				
Arkansas	13.9	—	1.8	7.5	19.0	6.6	5.4	3.2	4.6	1.1	.1	3.5	2.5	2.4	1.8	1.0	3.0	.4	—	82.2
Louisiana	30.7	.9	6.7	6.3	19.4	1.4	16.7	5.6	16.7	12.6	—	—	4.5	3.4	4.7	2.7	.1	6.4	.2	143.4
Oklahoma	12.9	—	.9	2.4	2.1	1.6	.6	5.9	1.6	7.5	1.5	.2	5.8	2.9	5.7	10.6	1.0	9.9	.5	74.4
Texas	68.4	.3	7.5	32.5	18.2	10.7	8.6	28.2	45.0	39.4	1.2	3.7	16.8	20.3	23.0	39.2	9.8	60.0	1.9	444.8
	125.9	1.2	16.9	48.7	58.7	20.3	31.3	42.9	67.9	60.5	2.8	7.4	29.6	29.0	35.2	53.5	13.7	76.7	2.6	744.8
MOUNTAIN																				
Arizona	4.1	—	—	.8	3.3	.3	.1	3.0	1.4	—	—	.1	.9	4.4	1.1	1.3	—	5.3	—	26.4
Colorado	16.8	—	.1	1.7	2.4	.9	.8	6.5	2.1	.8	5.3	3.3	3.0	7.3	2.5	5.0	5.1	5.6	.6	72.6
Idaho	8.2	—	—	.1	11.4	.1	.9	1.0	.9	—	—	—	.5	1.0	.4	.2	—	.1	—	25.1
Montana	4.0	—	—	—	7.2	—	1.7	1.6	.9	1.0	—	—	.5	4.0	.2	.1	—	—	—	21.3
Nevada	.8	—	—	—	.4	—	—	.7	.6	—	—	—	.8	1.4	.1	—	—	.3	—	5.2
New Mexico	4.4	—	—	1.0	1.9	.1	—	1.3	1.2	.7	—	.1	.9	.3	—	.7	.3	.3	.1	14.2
Utah	10.2	—	.2	1.5	.4	.4	.1	1.9	1.2	1.5	.2	—	1.5	9.0	1.9	1.3	.2	.1	—	32.0
Wyoming	1.8	—	—	—	.7	—	—	.7	—	2.0	—	—	.4	—	.1	.1	—	—	.1	5.9
	50.3	—	.3	5.1	27.7	1.8	3.6	16.7	8.3	6.0	5.5	3.5	8.5	27.4	6.3	8.7	5.6	11.7	.8	202.7
PACIFIC																				
California	170.7	.1	5.7	55.9	58.1	26.0	22.8	62.6	37.1	31.4	15.2	6.4	36.4	41.0	78.6	82.8	90.2	276.5	15.0	1,156.9
Oregon	19.9	3.5	4.0	2.5	66.5	1.8	7.2	5.3	1.6	.3	.3	.2	1.2	4.4	5.2	6.0	1.2	3.6	.5	137.0
Washington	25.2	—	3.8	4.1	40.5	3.5	16.3	8.3	10.6	.2	.1	.5	3.1	9.5	6.0	5.8	.9	78.0	.4	220.9
	215.8	3.6	13.5	62.5	165.1	31.3	46.3	76.2	49.3	31.9	15.6	7.1	40.7	54.9	89.8	94.8	92.3	358.1	15.9	1,514.8
U. S.	1,585.9	87.2	907.1	1,175.8	571.6	352.9	548.1	854.4	767.7	203.1	244.1	344.4	491.4	1,043.8	999.7	1,487.4	988.0	1,585.3	269.5	15,155.4

© SM, 1959.



why are you advertising?

You are asked to OK an ad campaign. The pictures are snappy. The layouts are good, the color strong. The copy sparkles. It looks all right . . .

But wait—

Just what is the advertising *for*? Specifically, what is each ad in the series supposed to *do*?

Is the advertising just to enhance prestige, to keep your name before the trade? If so, are you sure that's *all* it can do for you?

Does it seek to overcome specific sales obstacles? It can.

Is it supposed to produce good leads? It can.

Is it designed to help with the educational chore your salesmen face? It can.

Many sales executives have learned to their profit that advertising and sales promotion can carry a larger share of the sales load than they had ever thought possible – providing it is planned that way.

Advertising is most effective when it is assigned a definite part of the selling job – often a part that is time-consuming and costly for salesmen to cope with alone.

Whatever the advertising is designed to do, make sure it does it before you put that OK on the campaign.

The Schuyler Hopper Company
12 East 41st Street, New York 17, New York

"Ditch-Digging Advertising"* that Sells by Helping People Buy

*REG. U. S. PAT. OFF.



DOUBLE! IMPACT

How you can profit by a new depth in advertising to consulting engineers

Impact 1
A continuing analysis of Consulting Engineer activity, just released, proves that your advertising in CONSULTING ENGINEER magazine influences the men who design *and* specify products for projects—the key men of influence.

Impact 2
This analysis makes it possible for CONSULTING ENGINEER advertisers to *mail directly* to these important people—using part or all of our circulation list grouped into the 95 types of projects these engineers design and specify.

Get this Double Impact into your advertising program! Start by writing today for "Check List of 95 Classifications." You'll quickly see who is reading CONSULTING ENGINEER and to whom you can economically and effectively direct your own mail with pinpoint accuracy.



CONSULTING ENGINEER

Wayne near Pleasant Street, St. Joseph, Michigan
Sell the Men Who Write The Specifications

Manufacture of Food & Kindred Products—SIC 20

SM Estimates, 1958, for 4-Digit Industries of SIC 20

This group of industries includes companies manufacturing foods and beverages for human consumption, and such related products as manufactured ice, chewing gum, vegetable and animal fats and oils, and prepared feeds for animals and fowls. The change in product-values from 1954 to 1959 varies broadly from minor declines in some industries to considerable gains in others. There was a slight drop, for example, in chocolate and cocoa products (4-digit code 2072), while, at the other end of the scale, frozen fruits and vegetables (4-digit code 2037) rose sharply. The canned and frozen foods category generally (3-digit code 203) showed the greatest percentage gains, reflecting the continued promotion of new products.

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
20	FOOD AND KINDRED PRODUCTS	1,682			
2011	Meat packing plants	220	2011	209.1	11,375
2013	Prepared meats	43	2013	41.3	1,554
2015	Poultry dressing, wholesale	52		49.7	1,805
	Poultry dressing, wholesale	46	2015		
	Canned poultry	1	2033		
	Eggs, liquid, dried, frozen	5	2099		
2021	Creamery butter	21	2021	16.5	954
2022	Natural cheese	13	2022	10.4	653
2023	Condensed, evaporated milk	13	2023	11.8	865
2024	Ice cream and ices	36	2024	29.7	881
2025	Special dairy products	4	2025	3.4	196
2026	Fluid milk	194		163.1	5,723
	Cottage cheese	x	2022		
	Cultured buttermilk, etc.	3	2025		
	Fluid milk	14	2026		
	Fluid milk—other dairy products	177	2027		
2031	Canned and cured sea foods	17		16.4	307
	Canned sea foods	15	2031		
	Cured fish	2	2032		
2032	Canned specialties	31		30.2	724
	Canned specialties, n.e.c.	29	2033		
	Mincemeat	2	2099		
2033	Canned fruits and vegetables	93		89.6	2,171
	Canned fruits and vegetables	90	2033		
	Tomato sauces	3	2035		
2034	Dried and dehydrated fruits and vegetables	7	2034	7.2	242
2035	Pickled fruits and vegetables	19	2035	18.3	502
2036	Fresh and frozen packaged fish	12	2036	11.5	218
2037	Frozen fruits, vegetables and specialties	28		27.1	758
	Frozen canned soup	x	2033		
	Frozen fruits and vegetables	21	2037		
	Frozen baked goods	5	2099		
2041	Flour and meal	29	2041	28.6	1,883
2042	Prepared animal feeds	60	2042	56.7	[2,787
2043	Cereal preparations	12	2043	11.1	402
2044	Rice milling	4	2044	3.8	290
2045	Blended and prepared flour	6	2045	5.5	269
2046	Wet corn milling	14	2094	13.3	524
2051	Bread and other bakery products	248	2051	248.7	3,744
2052	Biscuits, crackers, etc.	48		46.2	912
	Biscuits, crackers, etc.	45	2052		
	Ice cream cones	1	2099		
2061	Cane sugar, raw	3	2061	2.8	74
2062	Cane sugar refining	16	2062	14.6	1,006
2063	Beet sugar	11	2063	10.2	366
2071	Confectionery products	67		62.5	1,187
	Confectionery products	67	2071		
	Confectionery chocolate	x	2099		
2072	Chocolate and cocoa products	8	2072	7.4	418
2073	Chewing gum	5	2073	4.7	180
2082	Malt liquors	81	2082	79.8	2,017
2083	Malt	3	2083	3.0	210
2084	Wines and brandy	6	2084	5.6	281
2085	Distilled liquors	22	2085	21.4	919
2086	Bottled soft drinks, etc.	92	2081	20.9	1,400
2087	Flavorings, n.e.c.	11	2095	10.9	543
2091	Cotton seed oil mills	14	2881	13.0	493
2092	Soybean oil mills	7	2883	6.9	923
2093	Vegetable oil mills, n.e.c.	3		3.0	179
	Linseed oil mills	1	2882		
	Vegetable oil mills, n.e.c.	2	2884		
2094	Grease and tallow	11	2886	11.1	257
2095	Animal and marine fats and oils	2	2889	2.0	80
2096	Shortening, table oils, etc.	12		11.3	1,393
	Shortening and cooking oils	9	2092		
	Oleomargarine	3	2093		
2097	Manufactured ice	21	2097	20.6	178
2098	Macaroni and spaghetti, etc.	7	2098	6.9	175
2099	Food preparations, n.e.c.	62		60.2	3,192
	Leavening compounds	3	2091		
	Food preparations, n.e.c.	59	2099		

*Not significant.

©SM, 1959.

Manufacture of Tobacco Products—SIC 21

SM Estimates, 1958, for 4-Digit Industries of SIC 21

Under this code are companies engaged in manufacturing cigarettes, cigars, smoking tobacco and chewing tobacco and snuff, as well as in stemming and redrying tobacco. The manufacture of insecticides from tobacco products, however, is included in major group 28 (chemicals and allied products.) Some duplication of enter-

Manufacture of Tobacco Products—SIC 21—(Cont'd)

SM Estimates, 1958, for 4-Digit Industries of SIC 21 (Cont'd)

prise exists in the four segments of the Tobacco Manufactures Industry, but the overlap is not so extensive as in most industries. Cigarettes continue to gain despite occasional health-scare publicity, and cigar sales have been climbing, too. Chewing tobacco and snuff, which have been considered by some trade analysts as a declining industry, actually showed a substantial sales rise during 1958.

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
21	TOBACCO MANUFACTURES	95			
2111	Cigarettes	30	2111	34.0	2,107
2121	Cigars	38	2121	27.7	374
2131	Tobacco and snuff	8	2131	6.7	175
2141	Tobacco stemming and redrying	19	2141	14.5	998

Manufacture of Textile Mill Products—SIC 22

SM Estimates, 1958, for 4-Digit Industries of SIC 22

Companies in this group include those (a) preparing fiber and subsequently manufacturing yarn, thread, braids, twine and cordage; (b) manufacturing broad woven fabric, knit fabric, and carpets and rugs from yarn; (c) dyeing and finishing fiber, yarn, fabric and knit apparel; (d) coating, waterproofing, or otherwise treating fabric; (e) the integrated manufacture of knit apparel and other finished articles from yarn; and (f) the manufacture of felt goods, lace goods, bonded-fiber fabrics, and miscellaneous textiles. The classification makes no distinction between the two types of organizations which operate in the textile industry: (1) the integrated mill which purchases materials, produces textiles and related articles within the establishment, and sells the finished products; and (2) the contract or commission mill which processes materials owned by others. Converters or other non-manufacturing establishments which assign materials to contract mills for processing (other than knitting) are classified in non-manufacturing industries; those companies which assign yarns to outside contractors or commission knitters for the production of knit products are classified in Knitting Mills (code 225).

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
22	TEXTILE MILL PRODUCTS	1,014			
2211	Cotton broad-woven fabric mills	296	2233	250.7	2,727
2221	Broad-woven, man-made and silk fabric mills	90	2234	75.2	1,025
2231	Broad-woven fabric mills, wool	67		53.9	884
	Woolen fabrics	63	2213		
	Dyeing, finishing woolen goods	4	2216		
	Shrinking, spong., broad-woven wool	x	2399		
2241	Narrow fabric mills	26	2241	23.7	262
2251	Full-fashioned hosiery mills	60	2251	56.5	505
2252	Seamless hosiery mills	63	2252	59.3	566
2253	Knit outerwear mills	46	2253	44.1	718
2254	Knit underwear mills	31	2254	29.8	325
2256	Knit fabric mills	17	2256	16.3	494
2259	Knitting mills, n.e.c.	3		2.8	57
	Knit gloves and mitten mills	2	2255		
	Knitting mills, n.e.c.	1	2259		
2261	Finishers of cotton broad-woven fabrics	55		53.1	736
	Finishing cotton broad-woven fabrics	55	2261		
	Shrinking, spong., broad-woven wool	x	2399		
2262	Finishers of syn., silk, broad-woven fabric	11		10.6	147
	Fin. of syn., silk, broad-woven fabric	11	2261		
	Preshrinking synthetic fabrics	x	2399		
2269	Dyeing and finishing textiles, n.e.c.	13	2261	12.6	174
2271	Woven carpets and rugs	29		24.6	754
	Woven carpets and pile, wool	26	2271		
	Woven carpets and rugs, non-wool	3	2273		
2272	Tufted carpets and rugs	7		6.0	181
	Auto, aircraft tufted carpets, wool	x	2271		
	Tufted carpets and rugs, n.e.c.	7	2273		
2279	Carpets, rugs, mats, n.e.c.	2		1.7	32
	Wool face on felt backing	x	2271		
	Carpets and rugs, n.e.c.	2	2273		
2281	Yarn spinning mills: Cotton, syn., and silk	70		59.2	911
	Yarn spun on silk, cotton system	70	2224		
	Carpet, rug yarns, except wool	x	2271		
2282	Yarn throwing, etc.: cotton, syn., and silk	12		10.5	111
	Non-wool yarns, spun on woolen system	x	2212		
	Thrown yarns	12	2222		
	Yarn twisting, winding, spooling	x	2224		
2283	Yarn mills, wool	22		17.7	262
	Wool yarns spun on woolen system	18	2212		
	Carpet, rug yarns, wool	4	2271		
2284	Thread mills	14	2223	11.9	185
2291	Felt goods, n.e.c.	6	2291	5.1	104
2292	Lace goods	7	2292	6.0	73
2293	Paddings and upholstery filling	9	2293	7.6	163
2294	Processed textile waste	6	2294	5.1	104
2295	Artificial leather, etc.	9	2295	8.1	224
2296	Tire cord and fabric	15	2224	12.2	195
2297	Wool scouring, etc.	7	2211	5.3	104
2298	Cordage and twine	12	2298	10.1	156
2299	Textile goods, n.e.c.	9	2299	7.8	130

*Not significant.

©SM, 1959.



the men behind your Milprint package

They're as different as men can be, but they have one thing in common: the heritage of more than half a century of experience that is Milprint's alone in the packaging field, and backed by the widest variety of packaging materials and printing processes available anywhere.

More and more manufacturers are sending America's fastest-selling products to market in packages by Milprint. Why don't *you* call your Milprint man — *NOW*?

Milprint* INC.

MAKES PACKAGING THAT MAKES SALES

General Offices, Milwaukee, Wisconsin
Sales Offices in Principal Cities

Printed Rolls, Foil, Cellophane, Glassine, Polyethylene, Saran, Acetate, "Mylar"®, Pliofilm, Vitafilm, Laminations, Extrusions, Folding Cartons, Bags, Lithographed Displays.

*Reg. U. S. Pat. Off.

This insert lithographed by Milprint, Inc.

A
Specialized
VERTICAL
PUBLICATION

FAST FOOD
magazine

With a HORIZONTAL COVERAGE

read by over 50,000 Counter, Fast Food and Fountain Restaurants

NO MATTER WHAT YOU CALL THEM — fountain restaurants, counter restaurants, luncheonettes, coffee shops, industrial cafeterias, diners, sandwich shops, drive-ins, etc.

NO MATTER WHERE YOU FIND THEM — in drug stores, variety stores, department stores, confectionery stores, airports, railroad stations, bus terminals, etc.

ON MAIN STREET OR MAIN HIGHWAY OR IN INDUSTRY — they all have one thing in common —

FAST SERVICE

When you specify Fast Food for an advertising schedule, it's an assurance of a market well covered vertically and horizontally.

A BILL BROTHERS PUBLICATION

BPA

Editorial and Executive Offices
630 Third Avenue New York 17, N. Y. YUkon 6-4800

NBP

Mid-Western Office: 333 N. Michigan Ave., Chicago 1, Ill., State 2-1266
Pacific Coast Representative:
The Richard Railton Co., Monadnock Bldg., San Francisco 5, Calif., Sutter 1-1060

It's 2 to 1... In fast-service eating places, twice-the-turnover-per-seat means more meals ... more sales ... more profits.

Manufacture of Apparel & Related Products—SIC 23

SM Estimates, 1958, for 4-Digit Industries of SIC 23

These industries are usually referred to as the cutting-up and needle trade. They include companies producing clothing and fabricated products by cutting and sewing purchased woven or knit textile fabrics, and such related materials as leather, rubberized fabrics, plastics and furs. Included in the apparel industries are three types of companies: (1) the regular or inside factories, (2) the contract factories, and (3) apparel jobbers. The regular factories perform all the usual manufacturing functions within their own plant; the contract factories manufacture apparel from materials owned by others; and apparel jobbers perform the entrepreneurial functions of a manufacturing company, such as buying raw materials, designing and preparing samples, arranging for the manufacture of the garments from their materials and the selling of the finished apparel. Custom tailors and dressmakers not operating on a factory basis are classified in non-manufacturing industries; those companies which purchase and resell finished garments but do not function as apparel jobbers are classified in wholesale trade.

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
23	APPAREL AND RELATED PRODUCTS	1,202			
2311	Men's suits, coats, etc.	119	2311	105.1	1,215
2321	Men's shirts, etc.	108	2321	115.7	1,113
2322	Men's, boys' underwear	9	2322	9.6	100
2323	Men's neckwear, etc.	9	2323	9.5	117
2327	Men's separate trousers	52	2327	54.4	488
2328	Work clothing, men's and boys'	52		56.3	572
	Work shirts, men's	7	2328		
	Work clothing, except shirts	45	2329		
2329	Men's, youth's, and boys' clothing, n.e.c.	46	2329	47.3	915
2331	Women's blouses, waists, shirts	44		42.5	448
	Women's blouses, waists, shirts	43	2331		
	Women's knit outerwear sport shirts	1	2339		
2335	Dresses, women's	190		181.1	2,380
	Dresses, unit-priced	143	2333		
	Dresses, dozen-priced	47	2334		
2337	Women's suits and coats	96	2337	91.4	1,513
2339	Women's, etc., outerwear, n.e.c.	34		32.7	501
	Aprons, etc.	8	2334		
	Women's neckwear	2	2338		
	Women's outerwear, n.e.c.	24	2339		
2341	Women's, etc., underwear and nightwear	73		74.3	916
	Women's underwear and nightwear	73	2341		
	Lounging pajamas	x	2384		
2342	Corsets and allied garments	38	2342	38.7	460
2351	Millinery	20	2351	17.1	218
2352	Hats and caps, except millinery	20		16.1	150
	Wool-felt hats	2	2282		
	Straw hats	2	2283		
	Fur-felt hats	8	2281		
	Cloth hats	8	2325		
2361	Children's dresses, blouses, waists, skirts	35		34.9	339
	Children's dresses, blouses, etc.	33	2361		
	Children's knit outerwear sport shirts	2	2369		
2363	Children's coats and suits	14	2363	15.2	175
2369	Girls', children's outerwear, n.e.c.	29	2369	31.8	328
2371	Fur goods	10	2371	9.5	323
2381	Fabric dress and work gloves	14		13.9	122
	Fabric dress gloves	4	2381		
	Fabric work gloves	10	2382		
2384	Robes and dressing gowns	10	2384	9.2	124
2385	Water-proof outer garments	13	2385	12.0	135
2386	Leather and sheep-lined clothing	5	2386	4.6	60
2387	Belts	13	2387	11.6	108
2389	Apparel, n.e.c.	9		8.5	108
	Garter belts	1	2342		
	Suspenders, garters, etc.	1	2383		
	Handkerchiefs	3	2388		
	Apparel, n.e.c.	4	2389		
2391	Curtains and draperies	14	2391	13.7	202
2392	House furnishings, n.e.c.	36	2392	36.4	639
2393	Textile bags	12	2393	11.9	209
2394	Canvas products	14	2394	13.7	136
2395	Pleating, decorative stitching, etc.	18		18.5	342
	Button-hole making for trade	x	2312		
	Tucking, pleating and hemstitching	6	2395		
	Art goods	1	2396		
	Embroideries, except schiffli-machine	11	2398		
2396	Apparel findings	22		20.9	422
	Hatters' fur	1	2284		
	Suit, coat findings, exc. hemstitching	3	2312		
	Hat materials	1	2326		
	Trimmings	17	2396		
2397	Schiffli-machine embroideries	6	2397	6.3	75
2399	Fabricated textile products, n.e.c.	18		17.7	271
	Fabricated textile products, n.e.c.	18	2399		
	Parachutes	x	3728		

x Not significant.

©SM, 1959.

Manufacture of Lumber & Wood Products—SIC 24

SM Estimates, 1958, for 4-Digit Industries of SIC 24

Included here are logging camps engaged in cutting timber and plywood, merchant saw mills, lath mills, shingle mills, cooperage stock mills, planing mills; and plywood mills and veneer mills engaged in producing lumber and wood basic materials, as well as companies engaged in manufacturing finished articles made entirely or mainly of wood or wood substitutes. Certain types of establishments producing wood products are classified elsewhere. For example, furniture and office and store fixtures are classified in major group 25. Woodwork in connection with construction, reconditioning and repairing, is classified in non-manufacturing industries.

Manufacture of Lumber & Wood Products—SIC 24—(Cont'd)

SM Estimates, 1958, for 4-Digit Industries of SIC 24

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
24	LUMBER, WOOD PRODUCTS EXC. FURNITURE	651			
2411	Logging camps and logging contractors	76	2411	73.6	852
2421	Saw mills, general	294	2421	236.6	3,128
2426	Hardwood dimension and flooring	28		27.6	300
	Hardwood flooring	24	2421		
	Furniture parts and vehicle stock	4	2499		
2429	Special products saw mills, n.e.c.	7		6.7	91
	Shingle mills	3	2423		
	Cooperage stock mills	3	2424		
	Excelsior mills	1	2425		
2431	Millwork plants	71		71.3	954
	Millwork except tanks	69	2431		
	Window and door screens	2	2561		
2432	Veneer and plywood mills	52		51.9	760
	Veneer mills	13	2422		
	Plywood plants, except particle board	39	2432		
2433	Prefabricated wood products	12	2433	11.7	262
2441	Nailed wood boxes	32		25.2	237
	Box shook from purchased lumber	3	2421		
	Cigar boxes	1	2443		
	Wooden boxes, n.e.c.	28	2444		
2442	Wire-bound boxes	11	2444	8.8	82
2443	Veneer, plywood containers exc. boxes	7	2441	8.9	36
2445	Cooperage	5		4.0	75
	Tobacco hogsheads	1	2444		
	Cooperage	4	2445		
2491	Wood preserving	12	2491	10.0	265
2499	Wood products, n.e.c.	44		42.7	475
	Cork floor and wall covering	x	2274		
	Tanks, wooden, except coopered	x	2431		
	Particle board	x	2432		
	Rattan and willow ware	1	2442		
	Lasts and related products	1	2492		
	Mirror and picture frames	5	2493		
	Wood products, n.e.c.	35	2499		
	Cork products	2	3982		

Manufacture of Furniture & Fixtures—SIC 25

SM Estimates, 1958, for 4-Digit Industries of SIC 25

This group of industries includes companies engaged in manufacturing household, office, public building, and restaurant furniture, and office and store fixtures. Establishments primarily engaged in the production of millwork are classified in Industry 2431, and woodworking to individual order or in the nature of reconditioning and repair has been classified under non-manufacturing industries.

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimate 1958 (New SIC Codes) Employment (thous.)	SM Estimate 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
25	FURNITURE AND FIXTURES	330			
2511	Wood house-furniture, not upholstered	125	2511	132.0	1,326
2512	Wood household furniture, upholstered	81	2512	53.6	781
2514	Metal household furniture	30	2514	31.9	525
2515	Mattresses and bedsprings	37		38.8	625
	Dual purpose furniture	5	2512		
	Mattresses and bedsprings	32	2515		
2519	Household furniture, n.e.c.	1	2519	1.1	16
2521	Wood office furniture	6	2521	6.5	59
2522	Metal office furniture	16	2522	17.4	306
2531	Public building furniture	14	2531	14.9	195
2541	Wood partitions and fixtures	15	2541	15.3	211
2542	Metal partitions and fixtures	18	2541	18.4	253
2591	Venetian blinds and shades	13		10.1	166
	Window shades	4	2562		
	Venetian blinds	9	2563		
2599	Furniture and fixtures, n.e.c.	4		3.8	48
	Hospital beds, etc.	x	2532		
	Other partitions and fixtures	x	2541		
	Restaurant furniture	3	2591		
	Furniture and fixtures, n.e.c.	1	2599		

Manufacture of Paper & Allied Products—SIC 26

SM Estimates, 1958, for 4-Digit Industries of SIC 26

These industries include companies manufacturing pulps from wood, cellulose fibers, and rags; and the conversion of paper and paperboard into paper bags, paper boxes, envelopes, etc. Certain types of converted paper products are classified elsewhere, such as abrasive paper in Industry 3291, carbon paper in Industry 3955, and photosensitized paper and blueprint paper in Industry 3861.

x Not significant

©SM, 1959.

SM Estimates, 1958, for 4-Digit Industries of SIC 26 (Cont'd)

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	Value Products Shipped ($ Mil.)
26	PAPER AND ALLIED PRODUCTS	532			
2611	Pulp mills	58	2611	59.2	1,987
2621	Paper mills, except building paper	97	2612	99.9	3,341
2631	Paperboard mills, except building paper	45	2612	46.7	1,551
2641	Paper coating and glazing	30		30.8	883
	Paper coating and glazing	28	2641		
	Waterproof wrapping paper, laminated	2	2699		
2642	Envelopes	16	2651	16.4	275
2643	Paper bags	33	2661	34.2	860
2644	Wallpaper	4	2693	4.1	33
2645	Die-cut paper and board	12	2691	12.3	247
2646	Pulp goods, pressed and molded	3	2694	3.1	63
2649	Converted paper products, n.e.c.	46		47.7	1,143
	Converted paper prod., exc. laminated	43	2699		
	Sanitary napkins, n.e.c.	3	3842		
2651	Folding paperboard boxes	42	2671	43.4	863
2652	Set-up paperboard boxes	28	2671	29.0	576
2653	Corrugated, solid fiber boxes	62		63.0	1,272
	Corrugated, solid fiber boxes	62	2671		
	Paperboard pallets	x	2699		
2654	Sanitary food containers	27	2699	28.7	671
2655	Fiber cans, tubes, drums, etc.	13		13.3	185
	Vulcanized fiber boxes	1	2671		
	Fiber cans, tubes, drums, etc.	12	2674		
2661	Building paper and board mills	16	2613	16.3	342

Printing & Publishing—SIC 27

SM Estimates, 1958, for 4-Digit Industries of SIC 27

Under this code are companies engaged in printing by one or more of the common processes—letterpress, lithography, gravure, or screen—and those establishments which perform services for the printing trade, such as bookbinding, typesetting, engraving, photoengraving, and electrotyping. Also organizations publishing newspapers, books, and periodicals, regardless of whether or not they do their own printing. News syndicates are classified in Service Industries, and textile printing and finishing in Textile Mill Products (major group 22).

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	Value Products Shipped ($ Mil.)
27	PRINTING, PUBLISHING, ALLIED INDUSTRIES	810			
2711	Newspapers	282	2711	305.4	3,462
2721	Periodicals	62	2721	61.0	1,532
2731	Books, publishing and printing	35	2731	39.9	875
2732	Book printing	23	2732	25.6	275
2741	Miscellaneous publishing	18	2741	17.8	277
2751	Commercial printing, except lithographic	176		187.6	2,318
	Playing cards, letterpress	x	2699		
	Commercial printing, n.e.c.	176	2751		
	Decalcomania, ltrpr., silk scr'n, gravure	x	2761		
2752	Lithography	69		75.9	1,010
	Playing cards, lithograph	1	2699		
	Lithography, n.e.c.	68	2761		
2753	Engraving and plate printing	8	2782	8.3	75
2761	Business forms, manifold	41		42.6	539
	Business forms, manifold	29	2751		
	Business forms, manifold	10	2761		
	Sales books	2	2782		
2771	Greeting cards	21	2771	22.2	239
2782	Blankbooks, looseleaf binders	15		15.2	156
	Blankbook making and paper ruling, n.e.c.	7	2782		
	Looseleaf binders and devices	8	2783		
2789	Bookbinding, related work	20		21.3	162
	Bookbinding	17	2781		
	Miscellaneous publishing work	3	2789		
2791	Typesetting	15	2791	15.4	143
2793	Photoengraving	18	2793	18.8	200
2794	Electroplatign and stereotyping	8	2794	8.4	90

Manufacture of Chemicals & Allied Products—SIC 28

SM Estimates, 1958, for 4-Digit Industries of SIC 28

This major group is one of the largest in American industry as a whole. It includes companies engaged in producing basic chemicals and those manufacturing products by predominantly chemical processes. Companies classified in this major group make three general classes of products: (1) basic chemicals such as acids, salts, alkalies, and organic chemicals; (2) chemical products to be used in further manufacture such as synthetic fibers, plastics materials, dry colors and pigments; (3) finished chemical products to be used as materials or supplies in other industries such as paints, fertilizers, and explosives. The mining of natural rock salt is classified

x Not significant.

©SM, 1959.

SM Estimates, 1958, for 4-Digit Industries of SIC 28 (Cont'd)

in Mining Industries. Companies primarily engaged in making non-ferrous metals and high percentage ferro-alloys are classified in Primary Metal Industries (major group 33); silicon carbide in Stone, Clay & Glass Products (major group 32); baking powder and other leavening compounds in Food & Kindred Products (major group 20); and embalming fluid and artists' colors in Miscellaneous Manufactures (major group 39). Companies primarily engaged in packaging, repackaging, and bottling of purchased chemical products, but not engaged in manufacturing chemicals and allied products, are classified in trade industries.

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	Value Products Shipped ($ Mil.)
28	CHEMICALS, ALLIED PRODUCTS	706			
2812	Alkalies and chlorine	20	2812	20.8	487
2813	Industrial gases	10	2896	11.3	207
2814	Cyclic (coal-tar) crudes	2	2821	2.1	98
2815	Intermediates, coal-tar products	33	2822	33.7	928
2816	Inorganic pigments	12		12.5	409
	Inorganic pigments	12	2852		
	Whiting	x	2853		
	Bone black, lamp black	x	2895		
2818	Industrial organic chemicals, n.e.c.	66		67.8	2,884
	Industrial organic chemicals, n.e.c.	66	2829		
	Ethylene	x	2896		
2819	Industrial inorganic chemicals, n.e.c.	102		102.6	2,795
	Sulfuric acid	4	2811		
	Industrial inorganic chemicals, n.e.c.	97	2819		
	Hydrogen sulfide	x	2896		
	Chemical catalytic preparations	1	2899		
2821	Plastics materials	41		47.0	1,864
	Plastic materials	41	2823		
	Nylo-polyamides (sutures, etc.)	x	2825		
2822	Synthetic rubber	9	2824	9.1	572
2823	Cellulosic man-made fibers	45	2825	46.1	979
2824	Synthetic fibers, except cellulosic	16	2825	15.7	347
2831	Biological products	4	2831	4.4	83
2833	Medicinal chemicals and botanical prod.	12	2833	13.4	307
2834	Pharmaceutical preparations	77	2834	88.2	2,441
2841	Soap and other detergents	33		32.1	1,433
	Soap and glycerin	26	2841		
	Synthetic detergents	7	2842		
2842	Specialty cleaning preparations	14		13.9	508
	Special cleaning preparations	11	2842		
	Disinfectants, non-personal	3	2899		
2843	Surface active agents	4		4.0	170
	Surface active agents	2	2629		
	Sulfonated oils and assistants	2	2843		
	Bulk surface active agents	x	2842		
2844	Toilet preparations	25		26.4	882
	Shaving soaps, shampoos from own soap	x	2841		
	Toilet preparations	25	2893		
2851	Paints and varnishes, etc.	56	2851	58.1	1,622
2852	Putty, calking compounds	1		1.0	27
	Paint and varnish removers	x	2842		
	Putty, calking compounds, etc.	1	2853		
2861	Gum and wood chemicals	8		8.1	230
	Hardwood distillation	2	2861		
	Softwood distillation	4	2862		
	Gum naval stores	1	2863		
	Dyeing, tanning materials	1	2865		
2871	Fertilizers (mfg. and mixing)	20	2871	19.3	557
2872	Fertilizers (mixing only)	12	2872	11.6	339
2873	Agricultural pesticides	9		9.7	257
	Insecticides and fungicides	7	2897		
	Agricultural pesticides	2	2899		
2879	Agriculture chemicals, n. e. c.	x	2899	x	x
2891	Glue and gelatin	9		10.1	208
	Glue and gelatin	7	2894		
	Sizes	2	2899		
2892	Explosives	32		32.2	307
	Explosives	32	2826		
	Fuses, marine, etc.	x	3965		
2893	Printing ink	8	2891	9.2	213
2894	Fatty acids	2	2887	1.8	73
2895	Carbon black	3	2895	3.5	121
2899	Chemical products, n. e. c.	21		24.2	692
	Essential oils	1	2892		
	Salt	4	2898		
	Chemical products, n. e. c.	13	2899		
	Fireworks and pyrotechnics	3	3965		

Manufacture of Petroleum & Coal Products—SIC 29

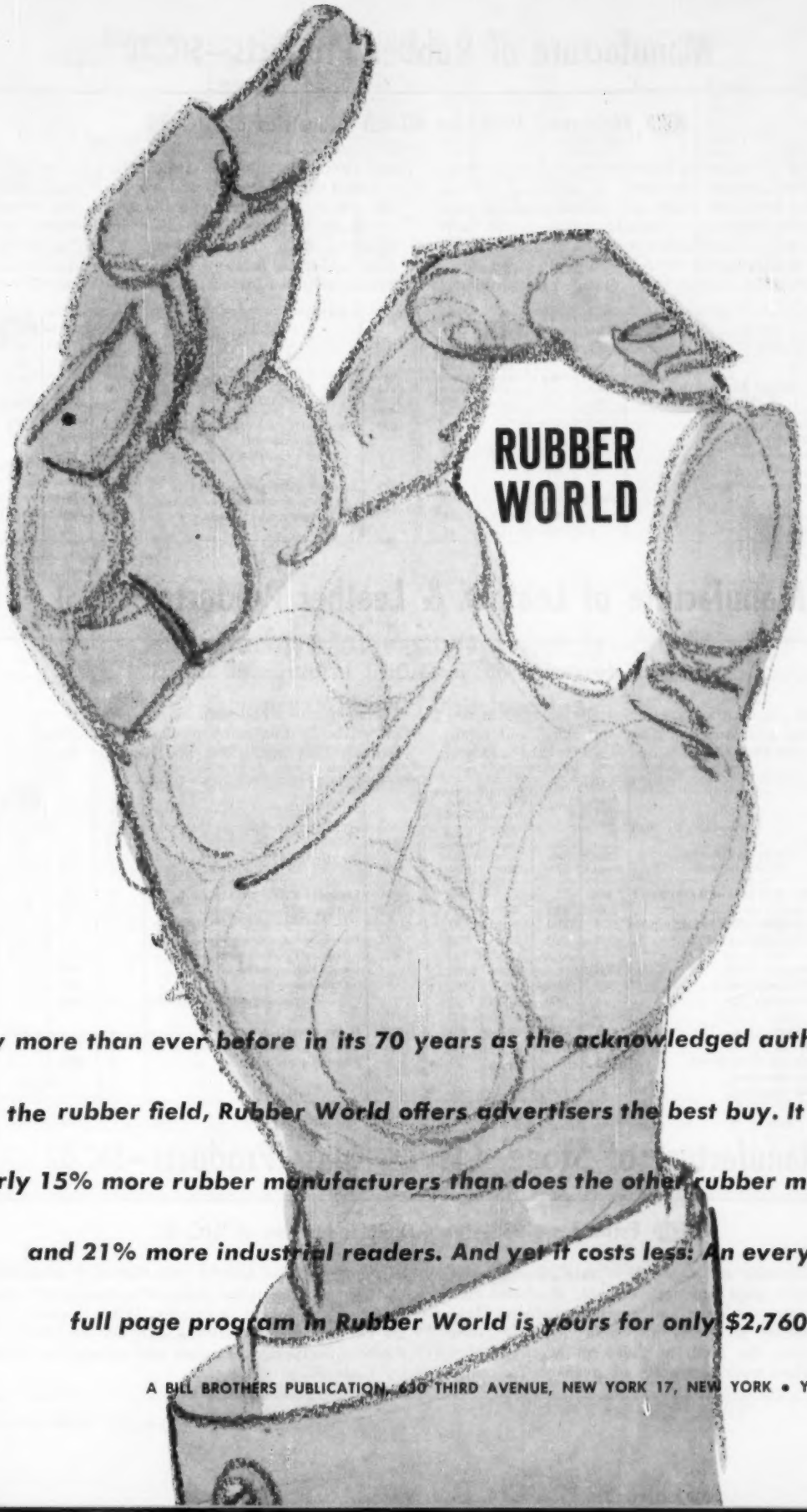
SM Estimates, 1958, for 4-Digit Industries of SIC 29

In this group are companies primarily engaged in petroleum refining, the manufacture of paving and roofing materials, and the compounding of lubricating oils and greases from purchased materials. Companies manufacturing and distributing gas to consumers are classified in public utilities industries.

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	Value Products Shipped ($ Mil.)
29	PETROLEUM REFINERY, RELATED PROCESSES	183			
2911	Petroleum refining	153	2911	144.4	14,472
2951	Paving mixtures and blocks	4	2951	3.9	225
2952	Roofing felts and coatings	16	2952	15.2	405
2992	Lubricants, n. e. c.	8	2992	7.5	250
2999	Petroleum and coal products, n. e. c.	2	2999	1.8	70

x Not significant.

©SM, 1959.



Now more than ever before in its 70 years as the acknowledged authority in the rubber field, Rubber World offers advertisers the best buy. It reaches nearly 15% more rubber manufacturers than does the other rubber magazine and 21% more industrial readers. And yet it costs less: An every-month, full page program in Rubber World is yours for only $2,760 a year.

A BILL BROTHERS PUBLICATION, 630 THIRD AVENUE, NEW YORK 17, NEW YORK • YUkon 6-4800

Manufacture of Rubber Products—SIC 30

SM Estimates, 1958, for 4-Digit Industries of SIC 30

This group of industries includes establishments manufacturing from natural, synthetic, or reclaimed rubber, gutta percha, balata, or gutta siak, rubber products such as tires, rubber footwear, mechanical rubber goods, heels and soles, flooring, and rubber sundries. It also includes companies manufacturing or rebuilding retreaded tires, but automobile tire repair shops engaged in recapping and retreading auto tires are classified in Services. Those engaged in the assembly and wholesale sale of scrap rubber are classified in Trade Industries. The manufacture of elastic webbing is classified in Industry Code 22. Products made of elastic webbing and garments made from rubberized fabrics are classified in Industry Code 23. Synthetic rubber appears in Industry Code 2824.

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
30	RUBBER, MISCELLANEOUS PLASTICS PRODUCTS	338			
3011	Tires and inner tubes	95		90.4	2,154
	Tires and inner tubes	93	3011		
	Camel-back and tiring	2	3099		
3021	Rubber footwear	18	3021	14.5	204
3031	Reclaimed rubber	3	3031	3.0	43
3069	Fabricated rubber products, n. e. c.	128		133.2	1,860
	Rubber weatherstrip	x	2561		
	Rubber industries, n. e. c.	128	3099		
3079	Fabricated plastics products, n. e. c.	94		110.7	1,801
	Synthetic sausage casings	2	2014		
	Fabricated plastics products, n. e. c.	92	3971		

Manufacture of Leather & Leather Products—SIC 31

SM Estimates, 1958, for 4-Digit Industries of SIC 31

Under this classification are companies engaged in tanning, currying and finishing hides and skins, and establishments manufacturing finished leather and artificial leather products and some similar products made of other materials. Leather converters are also included, including footwear, luggage, glove, and handbag manufacturers.

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
31	LEATHER AND LEATHER PRODUCTS	384			
3111	Leather tanning and finishing	43	3111	37.7	715
3121	Industrial leather belting, packing, n. e. c.	5	3121	4.4	67
3131	Footwear cut stock and findings	28	3131	22.8	294
3141	Footwear, except rubber	219		214.0	2,163
	Footwear, except rubber	219	3141		
	Shower slippers	x	2499		
3142	House slippers	11	3142	10.7	131
3151	Dress and work gloves, leather	6		5.3	51
	Leather dress gloves	4	3151		
	Leather work gloves	2	3152		
3161	Luggage, n. e. c.	16	3161	14.8	190
3171	Handbags and purses, women's	23	3171	23.1	211
3172	Personal leather goods, n. e. c.	15		13.2	146
	Toilet cases, sewing cases	x	3161		
	Small leather goods	7	3172		
	Leather watch straps	x	3199		
	Jewelry cases, leather instrument cases	6	3988		
3199	Leather products, n. e. c.	6		5.1	55
	Saddlery, harness and whips	1	3192		
	Leather goods, n. e. c.	5	3199		

Manufacture of Stone, Clay & Glass Products—SIC 32

SM Estimates, 1958, for 4-Digit Industries of SIC 32

These companies are engaged in manufacturing flat glass and other glass products, cement, structural clay products, pottery, concrete and gypsum products, abrasive and asbestos products, etc., from materials taken principally from the earth in the form of stone, clay and sand. When separate reports are available for mines and quarries operated by manufacturing establishments classified in this major group, the mining activities are classified in mining industries. When separate reports are not available, the mining activities are classified with the manufacturing operations and included under Industry Code 32.

x Not significant.

©SM, 1959.

SM Estimates, 1958, for 4-Digit Industries of SIC 32 (Cont'd)

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
32	STONE, CLAY, AND GLASS PRODUCTS	528			
3211	Flat glass	25	3211	23.9	394
3221	Glass containers	49	3221	51.9	793
3229	Pressed and blown glass, n. e. c.	42	3229	45.0	474
3231	Glass products, made of purchased glass	22	3231	22.1	405
3241	Cement, hydraulic	40	3241	40.3	1,004
3251	Brick and structural clay tile	32	3251	30.3	252
3253	Floor and wall tile, ceramic	11		11.1	105
	Floor and wall tile, ceramic	11	3253		
	Quarry and promenade tile	x	3259		
3255	Clay refractories	14	3255	13.3	218
3259	Structural clay products, n. e. c.	15		14.7	116
	Sewer pipes, clay	10	3254		
	Structural clay products, n. e. c.	5	3259		
3261	Vitreous plumbing fixtures	9	3261	8.3	145
3262	Vitreous china table, kitchen articles	9	3262	8.3	50
3263	Earthenware food utensils	13	3263	9.8	61
3264	Porcelain electrical supplies	10	3264	9.2	108
3269	Pottery products, n. e. c.	10		7.6	69
	China decorating for the trade	x	3265		
	Pottery products, n. e. c.	10	3269		
3271	Concrete brick and block	27	3271	28.5	486
3272	Concrete products, n. e. c.	33	3271	34.9	893
3273	Ready-mix concrete	36	5098	n. a.	n. a.
3274	Lime	8	3274	8.3	160
3275	Gypsum products	11	3272	11.5	309
3281	Cut-stone and stone products	22	3281	20.4	210
3291	Abrasive products	22	3291	22.6	434
3292	Asbestos products	22	3292	22.3	421
3293	Gaskets and asbestos insulators	13		13.1	162
	Leather washers	x	3121		
	Gaskets and asbestos insulators	13	3293		
3295	Minerals & earths: ground or treated	10		10.3	266
	Minerals & earths: ground or treated	8	3295		
	Magnesia or magnesite, dead-burned	1	3297		
	Exfoliated vermiculite	1	3299		
3296	Mineral wool	10	3275	10.3	209
3297	Non-clay refractories	8	3297	8.3	187
3299	Non-metallic mineral products, n. e. c.	5		5.4	67
	Non-metallic minerals, n. e. c.	3	3299		
	Statuary and art goods	2	3298		

Manufacture of Primary Metals—SIC 33

SM Estimates, 1958, for 4-Digit Industries of SIC 33

This group of industries includes companies engaged in the smelting and refining of ferrous and non-ferrous metals from ore, pig, or scrap, as well as in the rolling, drawing and alloying of ferrous and non-ferrous metals, and in the manufacture of castings, forgings, and other basic products of ferrous and non-ferrous metals. It also includes companies manufacturing nails, spikes, and insulated wire and cable.

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
33	PRIMARY METALS	1,167			
3312	Blast furnaces, steelworks & rolling mills	552		508.4	24,409
	Beehive coke ovens	1	2931		
	By-product coke ovens	32	2932		
	Blast furnace, steel works & rolling mills	519	3312		
3313	Electro-metallurgical products	11	3313	11.3	398
3315	Steelwire drawing	16		14.0	421
	Steelwire drawing	13	3392		
	Steel nails and spikes	3	3481		
3316	Cold-rolled sheet, strip and bars	15	3399	14.9	442
3317	Welded and heavy riveted pipe	22	3393	21.9	734
3321	Gray-iron foundries	134	3321	124.1	1,533
3322	Malleable-iron foundries	23	3322	21.3	205
3323	Steel foundries	55	3323	51.0	704
3331	Primary copper	14	3331	13.6	1,043
3332	Primary lead	4	3332	3.1	243
3333	Primary zinc	10	3333	7.4	222
3334	Primary aluminum	21	3334	20.1	788
3339	Primary non-ferrous metals, n. e. c.	6	3339	5.1	266
3341	Secondary non-ferrous metals	16	3341	14.8	800
3351	Rolling, drawing and extruding of copper	42	3351	43.6	1,257
3352	Aluminum rolling, drawing and extruding	39		39.9	1,373
	Aluminum rolling, drawing and extrud.	37	3352		
	Aluminum foil, plain	2	3497		

x Not significant. n.a. Not available. ©SM, 1959.

COPYRIGHT

Copyright Notice and Rights to Further Reproduction. The exclusive estimates of employment and value of products are fully protected by copyright.

Permission to reproduce these *Survey of Industrial Buying Power* data in printed form, in whole or in part, may be granted only through written request to SALES MANAGEMENT, INC.

Just Published 52nd Annual Edition

METAL STATISTICS 1959

AND BUYERS' GUIDE



LATEST IMPORT-EXPORT TABLES AND DATA

ON PRODUCTION, CONSUMPTION, SHIPMENTS AND PRICES OF METALS, MINERALS AND FUELS.

SPECIAL SECTION CONTAINING 123 PAGES OF LEADING SUPPLIERS OF STEEL, METALS PRODUCTS AND MATERIALS.

816 PAGES-CLOTHBOUND $3.50 POSTPAID

PUBLISHED BY

AMERICAN METAL MARKET

DAILY NATIONAL NEWSPAPER OF THE METAL INDUSTRY

PLEASE PRINT

AMERICAN METAL MARKET DEPT. MS
18 CLIFF ST., NEW YORK 38, N.Y.

Please send_____Copies of Metal Statistics 1959 @ $3.50 each. ($3.75 per copy if billed)

Name_____

Company_____

Address_____

City_____ State_____

ADD SALES TAX FOR N.Y.C. & PA. DELIVERIES

SM Estimates, 1958, for 4-Digit Industries of SIC 33 (Cont'd)

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Product Shipped ($ Mil.)
3356	Rolling and drawing, n.e.c.	10	3389	10.3	357
3357	Drawing and insulating of non-ferrous wire	54		57.8	1,423
	Non-ferrous wire drawing	40	3392		
	Non-ferrous insulated wire and cable	14	3631		
3361	Aluminum foundries	33	3361	23.3	401
3362	Copper, brass foundries	18	3361	12.2	219
3369	Non-ferrous castings, n.e.c.	22	3361	18.9	267
3391	Iron and steel forgings	40	3391	39.2	694
3392	Non-ferrous forgings	5	3399	5.0	147
33	Primary metals, n.e.c.	5		5.3	147
99	Primary metals, n.e.c.	5	3399		
	Non-ferrous nails, spikes	x	3481		

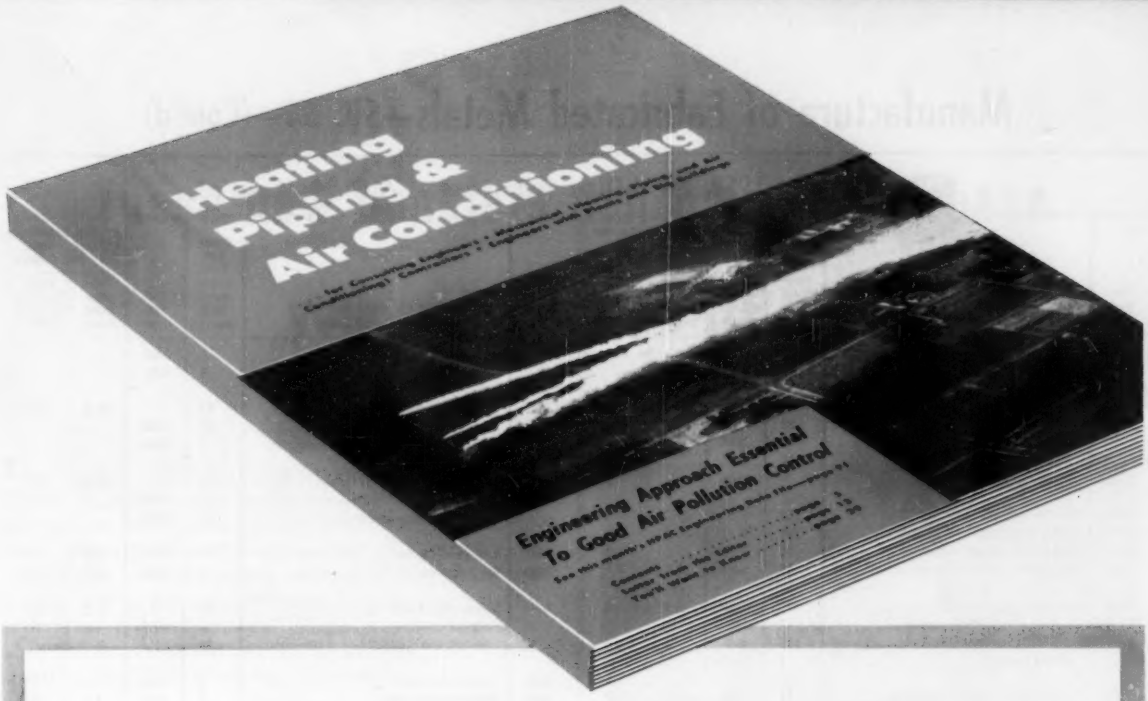
Manufacture of Fabricated Metals—SIC 34

SM Estimates, 1958, for 4-Digit Industries of SIC 34

These industries include companies engaged in fabricating ferrous and non-ferrous metal products such as metal cans, tinware, hand tools, cutlery, general hardware, non-electric heating apparatus, fabricated structural metal products, metal stampings, and a variety of metal and wire products not elsewhere classified. Certain important segments of the metal-fabricating industries are included in other major groups, such as ordnance in major group 19, machinery in major groups 35 and 36, transportation equipment in major group 37, professional, scientific and controlling instruments, watches and clocks in major group 38, and jewelry and silverware in major group 39. Companies primarily engaged in producing ferrous and non-ferrous metals and their alloys are in 33.

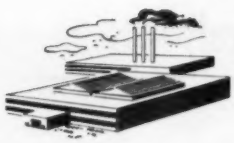
New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
34	FABRICATED METAL PRODUCTS	1,044			
3411	Metal cans	54	3411	53.8	1,714
3421	Cutlery	15	3421	13.3	188
3423	Hand and edge tools, n.e.c.	33		29.7	435
	Edge tools	7	3422		
	Hand tools, n.e.c.	23	3423		
	Files, etc.	3	3424		
	Electric soldering irons	x	3621		
3425	Hand saws and saw blades	7	3425	6.3	91
3429	Hardware, n.e.c.	88		78.3	1,318
	Hardware, n.e.c.	88	3429		
	Turnbuckles	x	3494		
3431	Enameled metal sanitary ware	15	3431	14.1	213
3432	Plumbing, brass goods	16	3431	15.0	227
3433	Heating equipment, except electric	48		45.5	874
	Heating equipment, n.e.c.	47	3439		
	Mechanical stokers	1	3568		
3441	Fabricated structural steel	75	3441	88.0	1,631

© SM, 1959.



EFFECTIVE PENETRATION

in the industrial—large building field





True to its name, HEATING, PIPING & AIR CONDITIONING confines itself to these three services as related specifically to the industrial-big building field.

Result: a concentrated editorial content vital to ALL of the purchase-control factors in this market—the consulting engineers, mechanical contractors, and engineers with plants and big buildings who identifiably are responsible for this work. Individually, or in combination, they specify and/or buy virtually every product required.

Alike in another respect, they form the reader-audience of HPAC. Each is, and has been, paying for it directly, individually, voluntarily. Here's assurance—backed up by dollars on the line and an ABC-audit—that HPAC is wanted, respected, and used!

Concentrate in HPAC, the book that ● has over 18,000 fully paid circulation ● leads in number of editorial pages ● leads by over 2 to 1 in advertising volume ● has more advertisers and is used exclusively by more advertisers. KEENEY PUBLISHING CO., 6 N. Michigan Ave., Chicago 2, Illinois.

Manufacture of Fabricated Metals—SIC 34—(Cont'd)

SM Estimates, 1958, for 4-Digit Industries of SIC 34 (Cont'd)

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
3442	Metal doors, sash, and trim	45		48.2	814
	Met. wind., door scr'ns. and weath'rstr'p.	2	2561		
	Metal doors, sash and trim	43	3442		
3443	Fabricated plate work	83		87.9	1,463
	Metal septic tanks	x	3431		
	Fabricated plate work	74	3443		
	Heat exchangers	9	3569		
3444	Sheet metal work	50	3444	53.6	850
3449	Architectural metal work	41	3441	44.2	890
3451	Screw-machine products	35	3495	33.6	460
3452	Bolts, nuts, washers and rivets	55	3494	53.3	917
3461	Metal stampings	137		134.2	2,265
	Vitreous enameled products	7	3481		
	Metal stampings	129	3463		
	Other tinware	1	3411		
3471	Electroplating, plating, polishing	36	3468	37.1	360
3479	Metal coating, engraving	13		13.2	113
	Enameling, lacquering, etc.	6	3465		
	Galvanizing	3	3466		
	Engraving on metal	4	3467		
3481	Wirework, n.e.c.	62		55.6	930
	Wirework, n.e.c.	60	3489		
	Wire springs, fencing, screening, etc.	2	3392		
3491	Metal barrels, drums and pails	11		10.3	257
	Fluid milk shipping containers	x	3411		
	Metal barrels, drums and pails	11	3491		
3492	Safes and vaults	3	3492	2.8	47
3493	Steel springs	7	3493	6.4	186
3494	Valves and pipe fittings	75		78.2	1,227
	Pipe hangers	x	3429		
	Valves and fittings (except plumbers)	75	3591		
3496	Collapsible tubes	4	3496	3.8	37
3497	Metal foil and leaf	5	3497	4.8	183
3498	Fabricated pipe and fittings	13	3592	13.5	253
3499	Fabricated metal products, n.e.c.	18	3499	16.3	290

Manufacture of Machinery (Except Electrical)—SIC 35

SM Estimates, 1958, for 4-Digit Industries of SIC 35

This group of industries includes companies engaged in manufacturing machinery and equipment other than electrical equipment (Industry Code 36), and transportation equipment (Industry Code 37). Machines powered by built-in or detachable motors ordinarily are included in this major group, with the exception of electrical household appliances (Industry Code 36). Portable tools, both electric and pneumatic-powered, are included in this classification, but hand tools are classified in Industry Code 34.

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
35	MACHINERY, EXCEPT ELECTRICAL	1,344			
3511	Steam engines and turbines	30		43.0	423
	Steam engines and turbines	30	3511		
	Gas turbines except aircraft	x	3519		
3519	Internal combustion engines, n.e.c.	52	3519	57.5	1,149
3522	Farm machinery	110		102.5	1,783
	Farm tractors	33	3521		
	Farm machinery (except tractors)	75	3522		
	Farm elevators	2	3563		
3531	Construction machinery	90		88.3	1,989
	Construction tractors	32	3521		
	Construction machinery	58	3531		
3532	Mining mach., equip. (exc. oil fld. mach.)	14	3531	13.9	309
3533	Oil field machinery and tools	34	3532	33.3	652
3534	Elevators and escalators	10	3562	10.2	202
3535	Conveyors and equipment	21	3563	21.3	357
3536	Hoists, industrial cranes	13		12.1	405
	Hoists	4	3531		
	Industrial cranes	9	3563		
3537	Industrial trucks, tractors	16	3565	15.8	279
3541	Machine tools, metal-cutting	81	3541	61.8	896
3542	Machine tools, metal-forming	27	3542	20.6	417
3544	Special dies, tools and fixtures	86		83.8	956
	Special dies, tools and fixtures	77	3544		
	Industrial molds	9	3594		
3545	Attachments and accessories for mach. tools	45	3545	34.3	578
3548	Metal-working machinery, n.e.c.	35		28.0	537
	Metal-working machines, n.e.c.	32	3542		
	Automotive maintenance equipment	3	3589		
3551	Food products machinery	33	3551	29.9	376
3552	Textile machinery	37	3552	32.6	339
3553	Woodworking machinery	12	3553	10.6	162
3554	Paper industries machinery	15	3554	13.4	319
3555	Printing trade machinery and equipment	22	3555	19.8	272
3559	Special industrial machinery, n.e.c.	47		42.3	737
	Special industrial machinery, n.e.c.	47	3559		
	Kilns, cement, wood, chemical	x	3567		
3561	Pumps and compressors	60	3561	56.3	952
3562	Ball and roller bearings	50	3593	49.8	594
3564	Blowers and fans	18	3564	16.5	235
3565	Industrial patterns	11	3594	10.8	123
3566	Power transmissions	38	3566	36.0	602

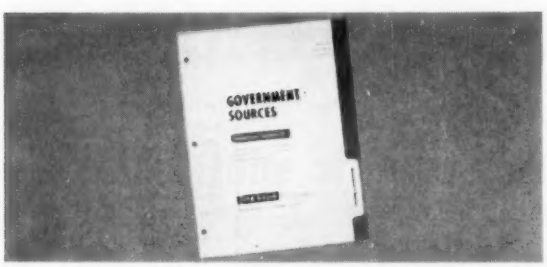
x Not significant.

©SM, 1959.

These new booklets can help to increase your sales to the OEM!

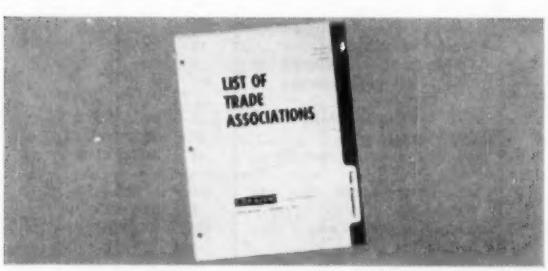
The Market Research Department of MACHINE DESIGN is constantly gathering, analyzing and compiling facts and figures relating to the Original Equipment Market. Available marketing aids range from simple lists of information sources to comprehensive studies about buying influences and motivations for individual product groups. Whatever your needs, be sure to check MACHINE DESIGN first . . . Headquarters for OEM Marketing Information.

For instance, the government spends hundreds of thousands to gather and analyze data covering practically every segment of the Original Equipment Market.



This LIST OF GOVERNMENT SOURCES will tell you how and where to get it.

Also, most trade associations compile comprehensive facts and figures about their industry. Furnished by member manufacturers, this information is impossible to get elsewhere.



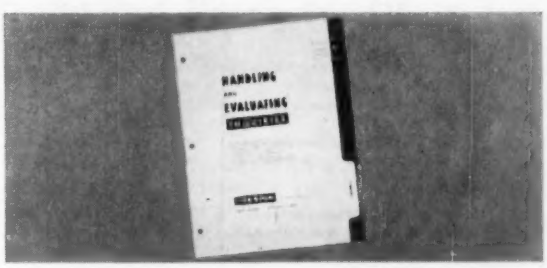
This LIST OF TRADE ASSOCIATIONS will make it easy for you to contact associations representing your best markets.

Knowing the characteristics of your markets is as important as pinpointing size and location.



DESIGN ENGINEERING PROBLEMS, including an additional report on New Product Development, will help you to relate your selling efforts to problem solving and specifying motivations.

How can you make the most of sales leads developed by advertising? How can you reduce follow-up costs by screening? How can you increase the conversion rate by systematic sales methods?



This brand new booklet, HANDLING AND EVALUATING INQUIRIES, will provide many of the answers you've been looking for.

Headquarters for OEM Marketing Information
MACHINE DESIGN
Penton Building, Cleveland 13, Ohio

Gentlemen:
Please send me the booklets checked below:

☐ List of Government Sources ☐ Design Engineering Problems
☐ List of Trade Associations ☐ Handling and Evaluating Inquiries

Name_____

Title_____

Company_____

Street_____

City_____ Zone_____ State_____

Manufacture of Machinery (Except Electrical)—SIC 35—(Cont'd)

SM Estimates, 1958, for 4-Digit Industries of SIC 35

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
3567	Industrial process furnaces and ovens	10		9.1	255
	Industrial furnaces and ovens, n.e.c.	8	3567		
	Industrial electric heating units	2	3619		
3569	General industrial machinery, n.e.c.	19	3569	18.1	320
3571	Computing machines	57	3571	69.5	911
3572	Typewriters	18	3572	20.2	234
3576	Scales and balances, except laboratory	5	3576	5.5	84
3579	Office machines, n.e.c.	14	3579	17.1	212
3581	Automatic merchandising machinery	6		7.1	90
	Automatic merchandising machines	3	3585		
	Automatic merchandising machines	3	3579		
3582	Commercial laundry, drycleaning machines	7	3582		
3584	Vacuum cleaners, industrial	x	3584	7.8	106
3585	Refrigeration equipment except household	74		83.0	914
	Refrigeration equip. except household	73	3585		
	Soda fountain, bar equipment	1	3997		
3586	Measuring and dispensing pumps	8	3586	9.0	103
3589	Services industry machines, n.e.c.	9		8.9	162
	Cooking equipment, commercial	4	3439		
	Service industry machines	3	3589		
	Commercial cooking equipment	2	3621		
3591	Machine shops			n. a.	n. a.
	Machine shops, repair	10	7699		
	Machine shops		3599		
3599	Machinery parts, n.e.c.	100	3599	n. a.	n. a.

Manufacture of Electrical Machinery—SIC 36

SM Estimates, 1958, for 4-Digit Industries of SIC 36

This group of industries includes companies engaged in manufacturing machinery, apparatus and supplies for the generation, storage, transmission, transformation and utilization of electrical energy. The manufacture of electric household appliances is included in this classification, but industrial machinery and equipment powered by built-in, detachable electric motors is classified in Industry Code 35.

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
36	ELECTRICAL MACHINERY	1,105			
3611	Electrical measuring instruments	33	3613	34.0	586
3612	Power, distr. and specialty transformers	41		41.2	681
	Power and specialty transformers	41	3615		
	Tripping transformers	x	3613		
3613	Switch gear and switchboard apparatus	53	3616	52.3	868
3619	Elec. transmission and distr. equip., n.e.c.	(1)	(1)	n. a.	n. a.
3621	Motors and generators	110	3814	110.6	1,323
3622	Industrial controls	27		27.3	443
	Industrial controls	26	3616		
	Rheostats and resistors, except radio	1	3619		
3623	Welding apparatus, electrical	8	3617	8.2	257
3624	Carbon and graphite products	8	3612	8.3	161
3629	Electrical industrial apparatus, n.e.c.	12	3619	12.4	226
3631	Household cooking equipment	22		13.2	402
	Cooking equipment, except electrical	16	3439		
	Household cooking equipment, electrical	6	3621		
3632	Household refrigerators	52	3585	39.9	645
3633	Household laundry equipment	22	3581	16.8	639
3634	Electric housewares and fans	38	3621	19.7	615
3635	Vacuum cleaners, household	8	3584	5.5	177
3636	Sewing machines	12	3583	10.4	113
3639	Household appliances, n.e.c.	15		10.2	274
	Water heaters, except electrical	8	3439		
	Household appliances, n.e.c.	4	3589		
	Household water heaters, electrical	3	3621		
3641	Electric lights	24		24.5	479
	Headlights, sealed beam	2	3471		
	Electric lamps (bulbs)	22	3651		
3642	Lighting fixtures	43		44.4	789
	Lighting fixtures, n.e.c.	43	3471		
	Ultraviolet and infrared fixtures	x	3693		
3643	Current-carrying wiring devices	25		27.7	413
	Lightning rods	x	3441		
	Current-carrying wiring devices	25	3611		
3644	Non-current-carrying wire devices	18	3611	19.2	298
3651	Radio and television receiving sets	87	3661	79.5	1,709
3652	Phonograph records	6	3663	7.2	126
3661	Telephone and telegraph apparatus	55	3664	64.9	1,148
3662	Radio and TV transmitting, sig. apparatus	120		151.3	2,354
	Communication equipment, n.e.c.	10	3669		
	Wireless telephone and telegraph	10	3664		
	Radio, TV transmitting apparatus	100	3661		
3671	Radio and TV receiving tubes	37	3662	33.9	414
3672	Cathode ray picture tubes	15	3662	13.9	168
3673	Transmitting industrial electron tubes	15	3662	14.2	168
3679	Electronic components and access., n.e.c.	111		133.2	2,165
	Transistors, etc.	4	3662		
	Electronic components, n.e.c.	107	3661		
3691	Storage batteries	16	3691	14.8	341
3692	Primary batteries (dry and wet)	11	3692	10.2	120
3693	Therapeutic apparatus	7	3693	8.0	96
3694	Engine electrical equipment	46	3641	40.3	660
3699	Electrical machinery, equipment n.e.c.	8		8.8	164
	Electric gongs, etc.	x	3669		
	Electrical products, n.e.c.	8	3699		

x Not significant. n.a. Not available.

©SM, 1959.

Manufacture of Transportation Equipment—SIC 37

SM Estimates, 1958, for 4-Digit Industries of SIC 37

Included here are companies engaged in manufacturing equipment for transportation of passengers and cargo by air, land and water. Important products manufactured by companies classified in this major group include motor vehicles, aircraft, ships, boats, railroad equipment, and miscellaneous transportation equipment such as motorcycles, bicycles and horse-drawn vehicles. Wheel-type tractors, except contractors' off-highway types, are in Industry Code 3522, track-laying tractors 3531, stamped body parts for passenger cars, busses and trucks in 3461, tires and tubes in 3011, vehicular lighting equipment 3642, ignition systems 3694, and aeronautical instruments 3811.

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
37	TRANSPORTATION EQUIPMENT	1,721			
3711	Motor vehicles	665 (2)	3717		
3712	Passenger-car bodies	(2)	3717		
3713	Truck and bus bodies	19	3713	15.3	243
3714	Motor vehicle parts and accessories	(2)		14.2	236
	Automotive bearings	12	3566		
	Rebuilt auto parts, valve cores, tires	4	3599		
	Motor vehicles (parts and accessories)	(2)	3717		
3715	Truck trailer	16	3715	12.9	283
3721	Aircraft	458	3721	442.0	7,837
3722	Aircraft engines and engine parts	167		160.5	3,544
	Aircraft engines and engine parts	167	3,722		
	Rocket engines	n. a.	3519		
3723	Aircraft propellers and propeller parts	17	3723	19.6	253
3729	Aircraft parts and auxiliary eqpt., n.e.c.	181		195.8	2,495
	Aircraft engine gears	x	3566		
	Aircraft equipment, n.e.c.	181	3729		
3731	Ship building and repairing	109	3731	126.7	1,529
3732	Boat building and repairing	17	3732	15.6	301
3741	Locomotives and parts	21	3741	19.0	426
3742	Railroad and street cars	31	3742	27.2	479
3751	Motorcycles, bicycles, and parts	7	3751	6.8	113
3791	Trailer coaches	10	3716	8.2	368
3799	Transportation equipment, n.e.c.	3		2.8	111
	Automobile trailers	1	3716		
	Transportation equipment, n.e.c.	2	3799		

Manufacture of Instruments & Related Products—SIC 38

SM Estimates, 1958, for 4-Digit Industries of SIC 38

This group of industries includes companies engaged in manufacturing mechanical measuring, engineering, laboratory and scientific research instruments, optical instruments and lenses and various individual precision goods. Establishments primarily engaged in manufacturing instruments for indicating, measuring and recording electrical quantities and characteristics are classified in Industry Code 3611. Measuring and dispensing pumps are in Industry 3586, electro-therapeutic, electro-medical and X-ray apparatus in 3693, and photographic flash, flood, enlarger and projection lamps in 3641. Gains in the medical and dental equipment field have been outstanding.

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
38	INSTRUMENTS AND RELATED PRODUCTS	276			
3811	Scientific instruments and associated equip.	48		53.9	790
	Laboratory furniture	3	2532		
	Laboratory balances	x	3576		
	Scientific instruments	45	3811		
3821	Mechanical measuring instruments, n. e. c.	44		45.5	633
	Mech. measuring instruments, n. e. c.	44	3821		
	Revolution counters	x	3571		
3822	Automatic temperature controls	25	3821	25.0	359
3831	Optical instruments and lenses	13	3831	13.0	145
3841	Surgical instruments and apparatus	10		10.5	124
	Hospital furniture, except beds	3	2532		
	Surgical, medical instruments, n. e. c.	7	3841		
3842	Surgical appliances and supplies	22		22.7	419
	Surgical corsets	x	2342		
	Electrical hearing aids	1	3699		
	Surgical appliances and supplies	21	3842		
3843	Dental equipment and supplies	7	3843	7.3	114
3851	Ophthalmic goods	18	3851	17.8	228
3861	Photographic equipment and supplies	59	3861	57.8	1,124
3871	Watches and clocks	26	3871	19.8	282
3872	Watch cases	4	3872	3.0	40

2 It is assumed that for 1958, Census again will consolidate SIC 3711, 3712 and 3714. The total given for 3711 is the sum of these three industries.

©SM, 1959.
x Not significant.

Miscellaneous Manufactures—SIC 39

SM Estimates, 1958, for 4-Digit Industries of SIC 39

Under this code are companies engaged in manufacturing products not classified in any other manufacturing major group. There is an inevitable partial overlap with some other industries. Children's vehicles (Industry Code 3943) does not include bicycles, which are in 3751. Establishments primarily engaged in manufacturing athletic apparel are in major group 23. Drafting instruments are in 3811 and not under the 3952 category. Industry 3962 (feathers, plumes and artificial flowers) does not include such products made of glass, which are in 3231. Industry 3993 (signs and advertising displays) does not include manufacturers of electrical signal equipment, which is classified in 3662. Similarly, lighting fixtures appear in Industry Code 3642.

New SIC Code	TITLES AND PARTS OF INDUSTRIES	Average Employment 1954 (thous.)	Old SIC Code	SM Estimates 1958 (New SIC Codes) Employment (thous.)	SM Estimates 1958 (New SIC Codes) Value Products Shipped ($ Mil.)
39	MISCELLANEOUS MANUFACTURES	375			
3911	Jewelry (precious metal)	23	3911	19.0	297
3912	Jewelers findings and materials	5	3912	4.1	79
3913	Lapidary work	2	3913	1.7	40
3914	Silverware and plated ware	17	3914	14.1	189
3931	Musical instruments	16		15.6	232
	Pianos	6	3931		
	Organs	2	3932		
	Piano and organ parts	3	3933		
	Musical instruments, n. e. c.	5	3939		
3941	Games and toys, n. e. c.	38	3941	37.4	453
3942	Dolls	15	3942	14.8	204
3943	Children's vehicles	6	3943	6.0	70
3949	Sporting and athletic goods, n. e. c.	29	3949	29.1	393
3951	Pens, pen points, ball-point pens, etc.			11.5	180
	Pens, pen points, ball-point pens, etc.	11	3951		
	Ball-point refill ink cartridges	x	2899		
3952	Lead pencils and crayons	7		7.2	80
	Lead pencils and crayons	5	3952		
	Artists' materials	2	3954		
3953	Marking devices	6	3953	6.2	53
3955	Carbon paper and inked ribbons	5	3955	5.3	105
3961	Costume jewelry	28	3961	25.5	212
3962	Feathers, plumes and artificial flowers	7	3962	6.5	56
3963	Buttons	8	3963	7.3	60
3964	Needles, pins and fasteners	23	3964	21.3	248
3981	Brooms and brushes	17	3981	16.8	204
3982	Linoleum, etc., n. e. c.	10	2274	9.6	167
3983	Matches	6	3983	6.0	67
3984	Candles	3	3984	3.0	32
3987	Lamp shades	5	3987	5.1	44
3988	Morticians' goods	17	3988	17.1	214
3992	Furs, dressed and dyed	3	3992	2.7	41
3993	Signs and advertising displays	34	3993	34.6	427
3995	Umbrellas, parasols and canes	3	3995	3.0	36
3999	Manufacturing industries, n. e. c.	31		31.3	285
	Coin-operated amusement machines	4	3579		
	Beauty and barber shop equipment	2	3991		
	Hair work	2	3994		
	Tobacco pipes, etc.	2	3996		
	Miscellaneous fabricated products, n.e.c.	21	3999		

x Not significant.

©SM, 1959.

Available soon

Plant Names By County, By 4-digit SIC Code

Market Statistics, Inc. is now compiling plant directories, by 4-digit industry classifications (old SIC code) for all large plants (with over 1,000 employes). For full details, write to

Market Statistics, Inc.

630 Third Avenue
New York 17, New York
Phone: YU 6-8557

There's a special rapport

between MODERN TIRE DEALER and its readers--

the nation's 32,000 tire, battery and accessory dealers

and tire retreaders.

Only in MODERN TIRE DEALER do dealers themselves

get a chance to say what they want and need

(through the 500-member MODERN TIRE DEALER Panel).

Only MODERN TIRE DEALER uses reader service cards

to check the continuing interest of its readers.

And only MODERN TIRE DEALER gets the kind of reader

enthusiasm which produces orders for 40,000

feature reprints in five months.

For a very small investment you, too, can share

in the results produced by the magazine

edited for dealers, about dealers.

For more details, write or call:

Modern Tire Dealer

THE MAGAZINE FOR THE TBA DEALER AND RETREADER

630 THIRD AVENUE • NEW YORK 17, NEW YORK
A BILL BROTHERS PUBLICATION • YUkon 6-4800

"Me not call on the purchasing agent? I gotta eat, don't I?"

Even the least experienced industrial salesmen quickly learn that they have to call on the P.A. And the "pros" have known it for years!

Your advertising *must* constantly support both the "freshman" and the "pro" by regularly calling on the purchasing agent just as they do. It's the P.A. who decides what share of the business you get, if any at all!

PURCHASING Magazine is the ONE magazine the P.A. reads thoroughly—because it's the ONLY magazine edited completely to his informational needs. The editorial material in PURCHASING tells the P.A. HOW to buy —the ads help him decide WHAT to buy. See this spelled out in our new slide film, "You and the Purchasing Revolution."



PURCHASING MAGAZINE

A CONOVER-MAST PUBLICATION

the methods and news magazine for industrial buyers

205 East 42nd Street, New York 17, New York

ABP ABC

This year some 625 advertisers are using PURCHASING Magazine to keep purchasing agents informed about their products. No other magazine in the field comes even close to this record.

Your Guide to

Prospect Identification

Counties Leading in 1958 Employment in SIC 4-Digit Industries

In the following pages (86-137), you will find, under each 4-Digit Code Classification, a list of counties accounting for the bulk of employment in that particular industry, with the number of plants and employes in each county.

The Salesman and the Purchasing Agent

By G. W. HOWARD AHL
Executive Secretary-Treasurer
National Association of Purchasing Agents

Lack of understanding of the common interests of salesmen and purchasing agents is one of the factors responsible for unnecessary losses to American industry.

Unnecessary sales and purchasing expense is an economic waste—a tax on legitimate industry. Its elimination will assure satisfactory profits to the producer, economy to the customer, and greater efficiency in business relations.

If both purchasing agents and salesmen will subscribe to the following standards, we feel that adoption will help increase mutual understanding and benefit:

1. To buy and sell on the basis of value, recognizing that value represents that quality, service and price which assure greatest ultimate economy to the user.

2. To respect our obligations and neither explicitly nor by implication promise a performance which we cannot reasonably expect to fulfill.

3. To avoid misrepresentation and sharp practice in purchases and sales. Permanent business relations can be maintained only on a structure of honesty and fair dealing.

4. To be courteous and considerate to those with whom we deal, to be prompt and businesslike in our appointments, and to carry on negotiations with all reasonable expedition so as to avoid depriving others of buyers' and salesmen's time.

5. To avoid statements tending to injure or discredit a legitimate competitor, and to divulge no information acquired in confidence with the intent of giving or receiving an unfair advantage in a competitive business transaction.

6. To strive for simplification and standardization within the bounds of utility and industrial economy, and to further the development of products and methods which will improve industrial efficiency.

7. To recognize that character is the greatest asset in commerce, and to give it major consideration in the selection of customers and source of supply.

8. To adjust claims and settle disputes on the basis of facts and fairness, to submit the facts to arbitration if a mutual agreement cannot be reached, to abide by the decision of the arbiters and to resort to legal measures in commercial disputes only when the preceding courses prove ineffective.

9. To provide or accept no gifts or entertainment in the guise of sales expense, where the intent or effect is to unduly prejudice the recipient in favor of the donor vs. legitimate competitors.

10. To give or receive no bribes, in the form of money or otherwise, in any commercial transaction, and to expose commercial bribery wherever encountered, for the purpose of maintaining the highest possible standards of ethics in industry.

Manufacture of Food & Kindred Products—SIC 20

Selling to SIC 20 . . .

By H. H. CAGLE,
General Purchasing Agent
Carnation Co.

Salesmen calling on us should be able to show specifically how their products may be used in our processes. Naturally, therefore, a salesman should become thoroughly acquainted with the type of business we conduct, and with our methods of doing business, just as soon as possible after first contacting us.

We have both centralization and decentralization in our industry and it is possible that a salesman may have to call on several purchasing agents to sell his complete line.

In our own company, purchasing agents are making every effort to learn as much as possible about our suppliers, their products, their methods of manufacture, and how well they are set up to supply our needs. We try to visit their plants; we have never reached the point where we felt that we knew our supplier sufficiently well to relax this curiosity.

We believe sales people must do the same thing with regard to their customers. With changing conditions and new products, we find that we must be more alert in inquiring about the capabilities of suppliers. By the same token, the sales representative must get in stride with the changing pace. If he has new products or new ideas, he must keep us posted. It may be necessary, in the future, that he carry fewer lines or specialize, in order to keep himself more thoroughly informed.

In our opinion, only about 50 to 60 of the salesmen calling on us are good representatives of their companies. The remainder may be pleasant congenial fellows, but they fall into the classification of order-takers or answer-getters.

SM Estimates for 4-Digit Employment, (Old Code), Leading Counties SIC 20

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2011—Meat Packing Plants		
Cook, Ill.	29	17.8
Douglas, Neb.	19	9.5
Dakota, Minn.	4	6.8
Los Angeles, Cal.	39	5.9
St. Clair, Ill.	9	5.9
Black Hawk, Iowa	1	5.9
Wyandotte, Kan.	12	5.3
Mower, Minn.	1	5.2
St. Louis, Mo.	22	4.8
Tarrant, Tex.	6	4.7
Dane, Wis.	1	3.9
Buchanan, Mo.	4	3.5
Baltimore, Md.	18	3.1
Milwaukee, Wis.	18	3.1
Minnehaha, S. D.	3	3.0
Oklahoma, Okla.	7	2.8
Wapello, Iowa	1	2.8
Allegheny, Pa.	20	2.7
Sedgwick, Kan.	6	2.6
Woodbury, Iowa	7	2.6
Total Above Counties	229	101.9
Industry Total	2,367	209.1
% of U. S.	9.7	48.7
*2013—Prepared Meats		
Cook, Ill.	105	8.0
Philadelphia, Pa.	31	2.8
Suffolk, Mass.	20	1.4
Wayne, Mich.	43	1.4
Baltimore City, Md.	17	1.4
Kings, N. Y.	45	1.3
Los Angeles, Cal.	47	1.3
New York, N. Y.	46	1.2
Middlesex, Mass.	13	1.0
Isle of Wight, Va.	2	1.0
San Francisco, Cal.	33	.9
Essex, N. J.	23	.9
Hillsborough Fla.	5	.8
Queens, N. Y.	11	.7
Bronx, N. Y.	30	.7
Hamilton, Ohio	15	.7
Milwaukee, Wis.	25	.7
Dallas, Tex.	5	.6
Erie, N. Y.	14	.6
Cuyahoga, Ohio	20	.5
Total Above Counties	551	27.7
Industry Total	1,308	41.3
% of U. S.	42.1	67.1
*2015—Poultry Dressing Plants		
Hall, Ga.	6	1.4
Sussex, Del.	9	1.4
Los Angeles, Cal.	49	1.0
Stanislaus, Cal.	5	.9
Rockingham, Va.	4	.9
Benton, Ark.	8	.8
Cook, Ill.	22	.7
Gonzales, Tex.	6	.5
Washington, Ark.	5	.5
Clarke, Ga.	2	.5
Worcester, Md.	5	.5
Fresno, Cal.	5	.5
Jefferson, Ala.	5	.4
Harrison, Va.	4	.4
Fulton, Ga.	3	.4
Carroll, Ark.	2	.4
Cherokee, Ga.	3	.4
Greene, Mo.	3	.4
Nobles, Minn.	1	.4
Marion, Ore.	3	.2
Total Above Counties	150	12.6
Industry Total	1,309	43.9
% of U. S.	11.5	28.7
*2021—Creamery Butter		
Jefferson, Ky.	3	.5
Greene, Mo.	4	.4
Franklin, Ohio	2	.3
Olmsted, Minn.	1	.3
Erie, N. Y.	3	.3
Shawano, Wis.	3	.3
Chippewa, Wis.	5	.2
Lee, Iowa	1	.2
Chippewa, Minn.	3	.2
Morton, N. D.	4	.2
Barry, Mo.	1	.2
Cook, Ill.	9	.2
Hamilton, Ohio	3	.2
La Crosse, Wis.	4	.2
Allegheny, Pa.	1	.1
Auglaize, Ohio	1	.1
Darke, Ohio	1	.1
St. Joseph, Mich.	1	.1
Dodge, Wis.	2	.1
Woodbury, Iowa	2	.1
Total Above Counties	54	4.3
Industry Total	1,262	17.1
% of U. S.	4.3	25.1
*2022—Natural Cheese		
Greene, Mo.	2	.7
Dodge, Wis.	51	.5
Clark, Wis.	49	.4
Marathon, Wis.	45	.3
Van Wert, Ohio	1	.3
Grant, Wis.	44	.3
Green, Wis.	47	.3
Manitowoc, Wis.	25	.3
Fond du Lac, Wis.	20	.2
Sheboygan, Wis.	26	.2
Lafayette, Wis.	36	.2
Stephenson, Ill.	22	.2
Iowa, Wis.	34	.2
Kewaunee, Wis.	23	.2
Outagamie, Wis.	26	.2
Shawano, Wis.	30	.1
Otsego, N. Y.	1	.1
Brown, Wis.	26	.1
Oconto, Wis.	21	.1
Delaware, N. Y.	1	.1
Total Above Counties	530	5.0
Industry Total	1,419	10.8
% of U. S.	37.4	46.3
*2023—Concentrated Milks		
Stanislaus, Cal.	5	.7
Maricopa, Ariz.	1	.3
Merced, Cal.	4	.3
Manitowoc, Wis.	3	.2
Bond, Ill.	1	.2
Montgomery, Ill.	1	.2
Allegan, Mich.	1	.2
Fond du Lac, Wis.	1	.2
Outagamie, Wis.	2	.2
Lee, Ill.	2	.2
Dane, Wis.	5	.2
Canyon, Ida.	2	.2
Newton, Mo.	2	.2
Harrison, W. Va.	1	.2
Mason, Ky.	1	.2
Laurence, Mo.	1	.1
Washington, Va.	1	.1
Warren, Ky.	1	.1
Greene, Tenn.	1	.1
Rutherford, Tenn.	2	.1
Total Above Counties	38	4.2
Industry Total	359	12.3
% of U. S.	10.6	34.1
*2024—Ice Cream and Ices		
Philadelphia, Pa.	20	2.2
Los Angeles, Cal.	39	1.5
Cook, Ill.	32	1.1
Queens, N. Y.	9	.9
Kings, N. Y.	19	.7
Allegheny, Pa.	15	.7
Alameda, Cal.	9	.7
Wayne, Mich.	21	.6
Baltimore City, Md.	11	.6
Washington, D. C.	9	.5
New York, N. Y.	7	.5
Erie, N. Y.	13	.4
Duval, Fla.	2	.4
Essex, N. J.	10	.4
Cuyahoga, Ohio	18	.4
Suffolk, Mass.	9	.4
Milwaukee, Wis.	8	.2
Middlesex, Mass.	14	.2
Monroe, N. Y.	12	.2
Providence, R. I.	19	.2
Total Above Counties	296	12.8
Industry Total	1,594	30.8
% of U. S.	18.6	41.6
*2025—Special Dairy Products		
Cook, Ill.	7	.9
Brown, Wis.	3	.6
DeKalb, Ga.	1	.3
Cooke, Tex.	2	.3
Clinton, Ill.	2	.2
Fulton, Ind.	1	.2
Ingham, Mich.	1	.2
Sheboygan, Wis.	2	.2
Waukesha, Wis.	2	.2
Greene, Mo.	4	.2
St. Joseph, Mich.	1	.2
Dallas, Tex.	1	.2
Bannock, Ida.	2	.2
Clearfield, Pa.	1	.1
Chenango, N. Y.	1	.1
Marathon, Wis.	2	.1
Queens, N. Y.	2	.1
Dodge, Wis.	2	.1
Total Above Counties	37	4.4
Industry Total	187	6.2
% of U. S.	19.8	71.0
*2026—Fluid Milk		
Dallas, Tex.	8	1.9

* Old SIC Code.

©SM, 1959.

SM Estimates for 4-Digit Employment, (Old Code), Leading Counties, SIC 20 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Dist. of Columbia	1	.9
Cook, Ill.	10	.5
Peoria, Ill.	3	.5
Caddo, La.	4	.5
Vanderburgh, Ind.	1	.5
Queens, N. Y.	12	.3
Worcester, Mass.	42	.3
Middlesex, Mass.	26	.3
Kern, Cal.	2	.3
Woodbury, Iowa	1	.3
San Mateo, Cal.	2	.2
Multnomah, Ore.	1	.2
Providence, R. I.	29	.2
San Bernardino, Cal.	4	.2
Los Angeles, Cal.	16	.2
Essex, Mass.	22	.2
New York, N. Y.	4	.2
Hartford, Conn.	19	.2
Bergen, N. J.	16	.2
Total Above Counties	223	8.1
Industry Total	1,695	11.8
% of U. S.	14.9	68.6

***2027—Fluid Milk & Other Products**

Los Angeles, Cal.	49	4.5
Philadelphia, Pa.	20	3.4
Allegheny, Pa.	40	2.8
Cuyahoga, Ohio	32	2.2
Cook, Ill.	50	2.2
St. Louis City, Mo.	15	2.1
Wayne, Mich.	32	2.0
Washington, D. C.	7	2.0
Baltimore City, Md.	9	1.9
Hamilton, Ohio	31	1.9
Alameda, Cal.	11	1.7
Jackson, Mo.	9	1.5
Marion, Ind.	13	1.4
Queens, N. Y.	11	1.4
Suffolk, Mass.	11	1.4
Erie, N. Y.	46	1.4
Harris, Tex.	8	1.3
King, Wash.	18	1.3
New Haven, Conn.	25	1.2
Essex, N. J.	15	1.2
Total Above Counties	452	38.8
Industry Total	4,994	154.4
% of U. S.	9.1	25.1

***2031—Canned Seafood**

Los Angeles, Cal.	11	3.2
San Diego, Cal.	3	1.6
Cumberland, Me.	7	.8
Harrison, Miss.	13	.8
Washington, Me.	20	.8
Clatsop, Ore.	7	.7
Hancock, Me.	8	.4
Jefferson, La.	3	.4
Terrebonne, La.	8	.4
Skagit, Wash.	6	.4
Knox, Me.	5	.4
Monterey, Cal.	7	.3
Cape May, N. J.	2	.2
Mobile, Ala.	2	.2
King, Wash.	14	.2
Contra Costa, Cal.	1	.2
Charleston, S. C.	4	.2
Orleans, La.	7	.2
Grays Harbor, Wash.	9	.2
Plaquemines, La.	4	.2
Total Above Counties	141	11.8
Industry Total	239	14.5
% of U. S.	59.0	81.4

***2032—Cured Fish**

Cook, Ill.	5	.2
Kings, N. Y.	13	.2
New York, N. Y.	3	.2
Kent, Md.	1	.2
Dallas, Tex.	4	.2
Los Angeles, Cal.	2	.1
Total Above Counties	28	1.1
Industry Total	90	1.9
% of U. S.	31.1	57.9

***2033—Canned Fruits and Vegetables**

Alameda, Cal.	20	6.0
Yakima, Wash.	17	5.9
Camden, N. J.	3	5.7
Santa Cruz, Cal.	30	5.5
Cook, Ill.	49	4.6
Marion, Ore.	20	4.6
Honolulu, Hawaii	10	4.6
Polk, Fla.	12	3.4
Santa Clara, Cal.	2	3.0
Muskegon, Mich.	1	3.0
Monroe, N. Y.	10	2.8
Sacramento, Cal.	8	2.8
San Joachim, Cal.	15	2.5
Baltimore, Md.	12	2.0
Dorchester, Md.	17	1.7
Allegheny, Pa.	1	1.5
Sonoma, Cal.	5	1.5
Maui, Hawaii	3	1.2
Hidalgo, Tex.	15	1.1
Stanislaus, Cal.	9	1.0
Total Above Counties	259	62.9
Industry Total‡	1,771	115.0
% of U. S.	14.6	54.7

***2034—Dehydrated Fruits and Vegetables**

Fresno, Cal.	22	2.1
Santa Clara, Cal.	18	1.6
Yakima, Wash.	5	.4
Solano, Cal.	2	.3
Cook, Ill.	7	.3
Meriwether, Ga.	1	.3
Los Angeles, Cal.	5	.3
Orleans, N. Y.	3	.2
Hudson, N. J.	1	.2
Bonneville, Ida.	1	.2
Merced, Cal.	5	.2
Wayne, N. Y.	3	.2
Sonoma, Cal.	9	.2
Stanislaus, Cal.	5	.2
Tulare, Cal.	3	.2
Alameda, Cal.	2	.1
Total Above Counties	92	7.0
Industry Total	148	7.2
% of U. S.	62.2	97.2

***2035—Pickles and Sauces**

Cook, Ill.	29	1.5
Los Angeles, Cal.	42	.9
Kings, N. Y.	38	.8
Grady, Ga.	2	.8
Baltimore City, Md.	13	.6
Alameda, Cal.	11	.6
Brown, Wis.	5	.5
Hudson, N. J.	9	.5
Dallas, Tex.	10	.5
Orleans, La.	5	.4
Queens, N. Y.	8	.4
Allegheny, Pa.	3	.4
Vigo, Ind.	3	.4
New York, N. Y.	10	.4
Ottawa, Mich.	3	.4
Muscatine, Iowa	1	.4
Wayne, N. C.	1	.4
San Francisco, Cal.	6	.4
Santa Clara, Cal.	4	.3
Philadelphia, Pa.	11	.2
Total Above Counties	218	10.8
Industry Total	713	21.2
% of U. S.	30.6	50.9

***2036—Packaged Seafood**

Glynn, Ga.	3	1.3
Norfolk, Va.	3	.7
Essex, Mass.	12	.7
Suffolk, Mass.	21	.6
Terrebonne, La.	4	.5
Cameron, Tex.	3	.5
Dorchester, Md.	6	.4
Somerset, Md.	10	.4
Chatham, Ga.	2	.4
King, Wash.	6	.4
Knox, Me.	4	.4
Hillsborough, Fla.	4	.4
Clatsop, Ore.	7	.4
Dallas, Tex.	2	.4
Cumberland, N. J.	6	.3
Lancaster, Va.	10	.3
Bristol, Mass.	4	.2
Talbot, Md.	5	.2
Dade, Fla.	2	.2
New York, N. Y.	13	.2
Total Above Counties	127	8.9
Industry Total	295	11.5
% of U. S.	43.1	77.4

***2037—Frozen Fruits and Vegetables**

Cumberland, N. J.	1	1.4
Pasco, Fla.	1	1.2
Albemarle, Va.	2	1.2
Polk, Fla.	6	1.1
Santa Cruz, Cal.	8	1.0
Orange, Fla.	3	.9
Santa Clara, Cal.	8	.8
Canyon, Ida.	2	.8
Yakima, Wash.	3	.8
Riverside, Cal.	1	.7
Snohomish, Wash.	5	.7
Stanislaus, Cal.	4	.7
Marion, Ore.	4	.5
Monterey, Cal.	1	.4
Orange, Cal.	4	.4
Faribault, Minn.	1	.4
Northampton, Va.	1	.4
Livingston, N. Y.	1	.4
Martin, Minn.	1	.4
Erie, Pa.	2	.4
Total Above Counties	59	14.6
Industry Total	266	21.8
% of U. S.	22.2	67.0

***2041—Flour and Meal**

Cook, Ill.	6	3.5
Erie, N. Y.	6	2.0
Hennepin, Minn.	6	1.0
Sangamon, Ill.	1	.9
Vanderburgh, Ind.	1	.8
Dallas, Tex.	8	.7
King, Wash.	3	.7
Clay, Mo.	4	.6
Cook, Ill.	5	.5
Saline, Kan.	3	.5
Jackson, Mo.	3	.4
Floyd, Ind.	1	.4
Los Angeles, Cal.	6	.4
Wayne, Mich.	1	.4
Madison, Ill.	1	.3
Sedgwick, Kan.	3	.3
Cowley, Kan.	3	.3
Morgan, Ala.	1	.3
Grayson, Tex.	2	.3
Spokane, Wash.	5	.3
Total Above Counties	71	14.6
Industry Total	803	26.6
% of U. S.	8.8	54.9

***2042—Prepared Animal Feeds**

Erie, N. Y.	19	2.0
Hennepin, Minn.	19	1.8
Los Angeles, Cal.	52	1.7
Polk, Iowa	15	1.3
Allen, Ind.	4	1.2
Cook, Ill.	21	1.2
Tarrant Tex.	12	.9
Kankakee, Ill.	1	.8
Shelby, Tenn.	9	.7
Jefferson, Ala.	4	.7
Jackson, Mo.	12	.7
Hamilton, Ohio	7	.6
St. Clair, Ill.	11	.6
Douglas, Neb.	11	.6
Lake, Ind.	3	.5
St. Louis City, Mo.	9	.5
Davidson, Tenn.	9	.5
Alameda, Cal.	8	.5
Multnomah, Ore.	13	.5
New York, N. Y.	7	.4
Total Above Counties	248	17.7
Industry Total	2,292	56.7
% of U. S.	10.7	31.2

***2043—Cereal Breakfast Foods**

Calhoun, Mich.	6	5.7
Linn, Iowa	2	1.3
Summit, Ohio	1	.7
Buchanan, Mo.	1	.7
Niagara, N. Y.	1	.6
Alameda, Cal.	2	.4
Douglas, Neb.	2	.4
San Joaquin, Cal.	2	.4
Hennepin, Minn.	3	.2
Worcester, Mass.	2	.2
Erie, N. Y.	2	.2
Vanderburgh, Ind.	1	.2
Total Above Counties	25	11.0
Industry Total	46	11.1
% of U. S.	54.3	99.1

***2044—Rice Milling**

Harris, Tex.	6	.9
Acadia, La.	18	.6
Vermilion, La.	7	.4
Arkansas, Ark.	8	.4
Jefferson, Tex.	3	.2
Sacramento, Cal.	1	.2
Orleans, La.	5	.1
Craighead, Ark.	2	.1
Calcasieu, La.	3	.1
San Francisco, Cal.	3	.1
Total Above Counties	56	3.1
Industry Total	80	3.8
% of U. S.	70.0	81.6

***2045—Flour Mixes**

Cook, Ill.	16	1.2
Jefferson, Ky.	1	.7
Erie, N. Y.	2	.6
Vanderburgh, Ind.	2	.5
San Joaquin, Cal.	1	.4
New York, N. Y.	3	.4
Butler, Ohio	1	.4
Los Angeles, Cal.	9	.3
Middlesex, N. J.	1	.2
Douglas, Neb.	3	.2
Montgomery, Pa.	1	.2
Kings, N. Y.	2	.2
Lucas, Ohio	1	.2
Total Above Counties	43	5.5
Industry Total	131	5.5
% of U. S.	32.8	100.0

***2051—Bread and Related Products**

Cook, Ill.	162	10.7
Philadelphia, Pa.	204	9.6
Los Angeles, Cal.	122	9.5
Wayne, Mich.	97	7.5
Kings, N. Y.	166	5.9
Queens, N. Y.	56	5.6
Essex, N. J.	54	4.6
New York, N. Y.	93	4.5
St. Louis City, Mo.	47	4.3
Cuyahoga, Ohio	51	4.1
Allegheny, Pa.	60	3.8
Baltimore, Md.	50	3.1
Suffolk, Mass.	58	3.0
Bronx, N. Y.	58	3.0
Erie, N. Y.	54	2.8
San Francisco, Cal.	54	2.7
Milwaukee, Wis.	37	2.6
Dallas, Tex.	30	2.6
Hamilton, Ohio	32	2.5
Marion, Ind.	24	2.4
Total Above Counties	1,539	94.8
Industry Total	6,215	246.5
% of U. S.	24.8	38.5

‡ Including Hawaii.
* Old SIC Code.

©SM, 1959.

Manufacture of Food & Kindred Products—(Cont'd)

SM Estimates for 4-Digit Employment, (Old Code), Leading Counties, SIC 20 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2052—Biscuit and Crackers		
Queens, N. Y.	3	2.5
New York, N. Y.	12	2.5
Philadelphia, Pa.	4	2.5
Middlesex, Mass.	4	1.6
Passaic, N. J.	2	1.4
Los Angeles, Cal.	13	1.4
Fulton, Ga.	3	1.4
Alameda, Cal.	4	1.2
Wyandotte, Kan.	1	1.0
Kent, Mich.	4	.9
Hamilton, Ohio	6	.9
Denver, Col.	4	.9
St. Louis, Mo.	9	.8
Montgomery, Ohio	3	.6
Allegheny, Pa.	3	.6
Douglas, Neb.	1	.6
Richmond City, Va.	1	.6
Union, N. J.	1	.6
Berks, Pa.	12	.6
Harris ,Tex.	1	.6
Total Above Counties	91	23.2
Industry Total	304	45.3
% of U. S.	29.9	51.2
*2061—Raw Cane Sugar		
Hawaii, Hawaii	14	2.9
Maui, Hawaii	3	2.5
Kauai, Hawaii	5	1.9
Lafourche, La.	6	.7
Hendry, Fla.	1	.4
St. Mary, La.	4	.3
Assumption, La.	5	.3
Indian River, Fla.	1	.2
Iberia, La.	7	.2
Iberville, La.	2	.1
St. Martin, La.	3	.1
West Baton Rouge, La.	3	.1
Lafayette, La.	2	.1
St. James, La.	2	.1
St. John the Baptist, La.	3	.1
Vermilion, La.	3	.1
Total Above Counties	64	10.1
Industry Total‡	71	10.4
% of U. S.	90.1	97.1
*2062—Cane Sugar Refining		
Philadelphia, Pa.	2	2.3
Orleans, La.	1	1.5
Kings, N. Y.	2	1.4
Suffolk, Mass.	2	1.1
Queens, N. Y.	1	1.0
Baltimore City, Md.	1	1.0
Contra Costa, Cal.	1	1.0
St. Bernard, La.	1	1.0
Chatham, Ga.	1	.9
Fort Bend, Tex.	1	.7
Westchester, N. Y.	1	.6
St. James, La.	1	.6
St. John the Baptist, La.	1	.6
Assumption, La.	1	.3
Lafourche, La.	1	.3
Terrebonne, La.	1	.3
Total Above Counties	19	14.6
Industry Total	23	14.6
% of U. S.	82.6	100.0
*2063—Beet Sugar		
Weber, Utah	1	1.0
Monterey, Cal.	1	.7
Salt Lake, Utah	1	.6
Weld, Col.	4	.5
Scotts Bluff, Neb.	3	.4
Yolo, Cal.	2	.4
San Joaquin, Cal.	2	.4
Alameda, Cal.	1	.4
Malheur, Ore.	1	.4
Santa Barbara, Cal.	1	.4
Minidoka, Ida.	1	.4
Yakima, Wash.	1	.4
Cerro Gordo, Iowa	1	.4
Morgan, Col.	2	.2
Larimer, Col.	2	.2
Huron, Mich.	2	.2
Butte, S. D.	1	.2
Putnam, Ohio	1	.1
Bay, Mich.	1	.1
Carver, Minn.	1	.1
Total Above Counties	30	7.5
Industry Total	65	10.2
% of U. S.	46.2	73.5
*2071—Confectionery Products		
Cook, Ill.	107	13.0
Philadelphia, Pa.	67	5.5
Middlesex, Mass.	26	3.3
Kings, N. Y.	54	3.3
Los Angeles, Cal.	73	2.0
Queens, N. Y.	15	2.0
Suffolk, Mass.	20	2.0
Suffolk, Va.	2	1.7
Norfolk, Va.	2	1.5
San Francisco, Cal.	22	1.4
Berks, Pa.	18	1.4
New York, N. Y.	38	1.2
Allegheny, Pa.	20	1.2
Essex, N. J.	13	1.2
Milwaukee, Wis.	14	1.2
San Joaquin, Cal.	1	.8
Muscogee, Ga.	3	.7
Baltimore, Md.	26	.6
Marion, Ill.	1	.6
Hamilton, Ohio	18	.6
Total Above Counties	540	45.2
Industry Total	1,443	62.5
% of U. S.	37.4	72.3
*2072—Chocolate and Cocoa Products		
Dauphin, Pa.	1	3.4
Oswego, N. Y.	1	.8
Suffolk, Mass.	2	.5
Kings, N. Y.	2	.5
Philadelphia, Pa.	1	.5
Erie, N. Y.	1	.3
Lancaster, Pa.	3	.3
Monterey, Cal.	1	.3
Milwaukee, Wis.	2	.2
Cook, Ill.	3	.2
Bristol, Mass.	1	.1
San Francisco, Cal.	3	.1
Essex, N. J.	2	.1
Total Above Counties	23	7.3
Industry Total	27	7.4
% of U. S.	85.2	98.6
*2073—Chewing Gum		
Queens, N. Y.	1	1.1
Kings, N. Y.	4	1.0
Cook, Ill.	2	1.0
Montgomery, N. Y.	1	.4
Philadelphia, Pa.	1	.3
Suffolk, Mass.	3	.2
Allegheny, Pa.	1	.2
Delaware, Pa.	2	.2
Shelby, Tenn.	1	.2
Total Above Counties	16	4.6
Industry Total	27	4.7
% of U. S.	59.3	97.9
*2081—Bottled Soft Drinks		
Cook, Ill.	58	2.5
Wayne, Mich.	25	1.8
Los Angeles, Cal.	43	1.7
Essex, N. J.	17	1.6
Philadelphia, Pa.	29	1.6
Kings, N. Y.	50	1.4
St. Louis City, Mo.	21	1.2
Queens, N. Y.	12	1.1
Cuyahoga, Ohio	23	1.0
Allegheny, Pa.	38	1.0
Baltimore City, Md.	13	.9
Hamilton, Ohio	14	.9
Dallas, Tex.	10	.8
Orleans, La.	10	.8
Shelby, Tenn.	11	.7
Marion, Ind.	8	.7
Fulton, Ga.	12	.7
Harris, Tex.	12	.7
Suffolk, Mass.	20	.6
Washington, D. C.	8	.6
Total Above Counties	434	22.3
Industry Total	4,631	90.9
% of U. S.	9.4	24.5
*2082—Beer and Ale		
Milwaukee, Wis.	6	9.4
Kings, N. Y.	5	7.7
Essex, N. J.	6	6.6
St. Louis City, Mo.	7	5.6
Wayne, Mich.	6	3.6
Los Angeles, Cal.	7	3.2
San Francisco, Cal.	6	2.5
Cuyahoga, Ohio	6	2.1
Cook, Ill.	13	1.9
Orleans, La.	4	1.8
Allegheny, Pa.	4	1.8
Baltimore City, Md.	4	1.7
Ramsey, Minn.	2	1.7
Philadelphia, Pa.	4	1.4
Hamilton, Ohio	6	1.3
New York, N. Y.	1	1.2
Bexar, Tex.	2	1.1
Jefferson, Ky.	3	.9
Monroe, N. Y.	3	.9
Providence, R. I.	2	.9
Total Above Counties	97	57.3
Industry Total	300	80.4
% of U. S.	32.3	71.3
*2083—Malt		
Milwaukee, Wis.	6	.8
Cook, Ill.	4	.5
Jefferson, Wis.	2	.4
Manitowoc, Wis.	2	.2
Hennepin, Minn.	5	.2
Erie, N. Y.	4	.1
Total Above Counties	23	2.2
Industry Total	45	3.0
% of U. S.	51.1	73.3
*2084—Wines and Brandy		
Napa, Cal.	13	1.7
Fresno, Cal.	23	1.2
Stanislaus, Cal.	3	.3
San Joaquin, Cal.	14	.3
Steuben, N. Y.	5	.3
New York, N. Y.	18	.2
San Bernardino, Cal.	18	.2
Sonoma, Cal.	19	.2
Los Angeles, Cal.	4	.2
Kings, N. Y.	4	.2
Bergen, N. J.	1	.2
Alameda, Cal.	10	.2
Baltimore City, Md.	1	.1
Van Buren, Mich.	6	.1
Atlantic, N. J.	5	.1
Ontario, N. Y.	2	.1
Total Above Counties	148	5.6
Industry Total	262	5.8
% of U. S.	55.7	96.6
*2085—Distilled Liquor, Except Brandy		
Jefferson, Ky.	15	4.0
Dearborn, Ind.	3	2.6
Peoria, Ill.	2	1.7
Baltimore, Md.	6	1.4
Franklin, Ky.	3	1.2
Philadelphia, Pa.	6	1.2
Nelson, Ky.	12	1.1
Hamilton, Ohio	4	1.0
Daviess, Ky.	2	.7
New York, N. Y.	2	.7
Tazewell, Ill.	1	.7
Armstrong, Pa.	1	.7
Woodford, Ky.	4	.6
Suffolk, Mass.	5	.5
Moore, Tenn.	1	.4
Union, N. J.	2	.4
Bullitt, Ky.	1	.4
Fresno, Cal.	1	.3
Muscatine, Iowa	1	.2
Anderson, Ky.	4	.2
Total Above Counties	77	20.0
Industry Total	133	21.6
% of U. S.	57.9	92.6
*2091—Leavening Compounds		
Westchester, N. Y.	2	.5
Tazewell, Ill.	1	.5
Middlesex, N. J.	2	.2
Milwaukee, Wis.	3	.2
Cook, Ill.	2	.2
Essex, N. J.	2	.2
St. Louis City, Mo.	2	.2
Washington, D. C.	1	.2
Kern, Cal.	2	.2
Providence, R. I.	1	.1
Total Above Counties	18	2.5
Industry Total	43	3.0
% of U. S.	41.9	83.3
*2092—Shortening and Cooking Oils		
Cook, Ill.	10	1.1
Ramsey, Minn.	1	.8
Hamilton, Ohio	1	.7
Shelby, Tenn.	3	.7
Bergen, N. J.	1	.7
Los Angeles, Cal.	10	.6
Hamilton, Tenn.	2	.5
Richmond, N. Y.	1	.4
Lake, Ind.	1	.4
Franklin, Ohio	1	.4
Grayson, Tex.	2	.4
Jefferson, La.	2	.4

‡ Including Hawaii.
* Old SIC Code.

©SM, 1959.

SM Estimates for 4-Digit Employment, (Old Code), Leading Counties, SIC 20 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Dallas, Tex.	2	.3
Norfolk, Va.	2	.2
Bibb, Ga.	1	.2
Jefferson, Ky.	1	.2
Houston, Ala.	1	.2
Tarrant, Tex.	2	.2
Oklahoma, Okla.	1	.1
Alameda, Cal.	1	.1
Total Above Counties	48	8.6
Industry Total	102	8.6
% of U. S.	45.1	100.0
*2093—Margarine		
Marion, Ind.	1	.5
Dallas, Tex.	3	.3
Wayne, Mich.	1	.2
Cook, Ill.	2	.2
Hudson, N. J.	1	.2
Hamilton, Ohio	2	.2
Baltimore City, Md.	1	.2
Alameda, Cal.	1	.2
Huron, Ohio	1	.2
Grayson, Tex.	1	.2
Fulton, Ga.	2	.1
Total Above Counties	16	2.5
Industry Total	33	3.0
% of U. S.	48.5	83.3

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2094—Corn Wet Milling		
Cook, Ill.	2	2.9
Macon, Ill.	1	2.0
Clinton, Iowa	1	1.5
Tazewell, Ill.	1	1.2
Lake, Ind.	1	1.0
Linn, Iowa	2	1.0
Madison, Ill.	1	.7
Lee, Iowa	1	.7
Clay, Md.	1	.7
St. Louis City, Mo.	1	.4
Marion, Ind.	1	.4
Nueces, Tex.	1	.4
Aroostook, Me.	18	.1
Total Above Counties	32	13.0
Industry Total	58	13.3
% of U. S.	55.2	97.7
*2095—Flavorings		
Cook, Ill.	53	1.6
Los Angeles, Cal.	27	.7
Philadelphia, Pa.	17	.6
Kings, N. Y.	29	.6
New York, N. Y.	33	.4
Muscogee, Ga.	1	.4
Monroe, N. Y.	6	.4
Queens, N. Y.	10	.4
San Bernardino, Cal.	2	.4
St. Louis City, Mo.	15	.4
Dallas, Tex.	7	.3
Bronx, N. Y.	13	.2

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Allegheny, Pa.	6	.2
Cuyahoga, Ohio	7	.2
Baltimore City, Md.	11	.2
Hamilton, Ohio	10	.2
Richmond City, Va.	3	.2
Fulton, Ga.	7	.2
Suffolk, Mass.	14	.1
Essex, N. J.	7	.1
Total Above Counties	278	7.8
Industry Total	556	10.9
% of U. S.	50.0	71.6
*2097—Manufactured Ice		
Cook, Ill.	21	.6
Nueces, Tex.	5	.4
St. Louis City, Mo.	4	.4
Los Angeles, Cal.	22	.4
Orleans, La.	20	.3
Fulton, Ga.	8	.3
Harris, Tex.	17	.3
Wayne, Mich.	5	.2
Bronx, N. Y.	3	.2
Shelby, Tenn.	10	.2
Jefferson, Ala.	13	.2
Duval, Fla.	8	.2
Dallas, Tex.	8	.2
Monterey, Cal.	12	.2
Hillsborough, Fla.	8	.1
Erie, N. Y.	10	.1
Marion, Ind.	7	.1
Philadelphia, Pa.	1	.1

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
New York, N. Y.	4	.1
Franklin, Ohio	3	.1
Total Above Counties	189	4.7
Industry Total	1,952	21.2
% of U. S.	9.7	22.2
*2098—Macaroni and Spaghetti		
Kings, N. Y.	13	.7
Queens, N. Y.	9	.6
Cook, Ill.	16	.5
Hudson, N. J.	2	.4
Los Angeles, Cal.	19	.3
Bergen, N. J.	3	.3
Lebanon, Pa.	1	.2
Jackson, Mo.	1	.2
Allegheny, Pa.	3	.2
Vigo, Ind.	1	.2
Hennepin, Minn.	3	.2
Middlesex, Mass.	2	.2
St. Louis City, Mo.	5	.2
Orleans, La.	5	.2
Alameda, Cal.	6	.2
San Francisco, Cal.	16	.2
Douglas, Neb.	2	.2
Jefferson, Ky.	1	.2
Shelby, Tenn.	1	.1
Lake, Ill.	2	.1
Total Above Counties	111	5.4
Industry Total	233	7.1
% of U. S.	47.6	76.1

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2099—Miscellaneous Food Preparations		
Cook, Ill.	135	6.0
Philadelphia, Pa.	39	3.1
Hudson, N. J.	25	3.1
Los Angeles, Cal.	144	2.9
Kings, N. Y.	64	2.8
Henry, Ohio	1	1.7
San Francisco, Cal.	42	1.7
Mecklenburg, N. C.	9	1.6
Douglas, Neb.	11	1.4
Dallas, Tex.	40	1.2
Fulton, Ga.	23	1.2
New York, N. Y.	75	1.2
St. Louis City, Mo.	38	1.1
Harris, Tex.	19	1.1
Orleans, La.	27	1.1
Baltimore, Md.	29	1.0
Queens, N. Y.	16	.9
Jackson, Mo.	17	.9
Cuyahoga, Ohio	27	.8
Hamilton, Ohio	16	.8
Total Above Counties	843	35.3
Industry Total	2,592	70.3
% of U. S.	32.5	50.2

* Old SIC Code.

©SM, 1959.

Manufacture of Tobacco Products—SIC 21

Selling to SIC 21 . . .

By C. C. JOHNSON
Purchasing Agent
R. J. Reynolds Tobacco Co.

Our buyers must be fully familiar with the products they buy. They must have detailed knowledge of product uses, inventory position, and market conditions. They must practice value-analysis to the extent that they know their company is receiving equivalent value for the dollars being spent. It follows that the sales representatives who call on us should also be well informed on the products or services they are selling and, in addition, that they should be in a position to tell us how their products or services can be of benefit to our company.

Too frequently we find that sales representatives, while very aggressive when new business is concerned, do not take advantage of the opportunity to increase customer service by sales follow-ups which determine whether or not products are performing to the customer's satisfaction. In some instances minor changes can mean the difference between a long-term satisfied customer and one who looks for a new supplier.

A sales representative interested in building supplier relations for the long pull, will explore in detail such customer needs as special services required, specification performance necessary, and preferred method of packing. He will see that delivery commitments are lived up to.

A new trend in purchasing, "Integrated Materials Control," is placing purchasing men in position to increase their value to their companies. This new concept is going to demand maximum performance on the part of suppliers. If investment in inventories is to be lowered—and it will be—closer scheduling of deliveries and assured performance by suppliers will be necessary. Closer cooperation between production scheduling, traffic, purchasing, inventory control, receiving and warehousing and quality control, will result in more effective total control over material needs, but at the same time, will dictate changes in working arrangements with suppliers that will benefit both sides.

Your Guide to Prospect Identification—Pages 85-137

Manufacture of Tobacco Products—SIC 21—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 21

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2111—Cigarettes		
Jefferson, Ky.	4	8.0
Richmond City, Va.	4	7.3
Forsyth, N. C.	1	7.1
Durham, N. C.	2	4.9
Guilford, N. C.	1	3.0
Petersburg, Va.	1	2.2
Rockingham, N. C.	1	2.1
Charleston, S. C.	1	1.3
Hudson, N. J.	1	.7
Suffolk, N. Y.	1	.7
Philadelphia, Pa.	1	.2
New York, N. Y.	3	.1
Total Above Counties	21	37.6
Industry Total	22	37.6
% of U. S.	100.0	100.0

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2121—Cigars		
Hillsborough, Fla.	38	4.9
Philadelphia, Pa.	20	3.8
Luzerne, Pa.	7	3.2
Duval, Fla.	2	2.4
York, Pa.	50	2.3
Charleston, S. C.	1	1.3
Ware, Ga.	1	1.0
Lackawanna, Pa.	4	1.0
Lehigh, Pa.	4	.8
Mercer, N. J.	2	.7
Orleans, La.	2	.6
Lancaster, Pa.	3	.6
Camden, N. J.	1	.6
Dallas, Ala.	1	.6
Jefferson, Ky.	3	.6
Allen, Ohio	3	.6
Vanderburgh, Ind.	2	.6
Richmond, Va.	1	.6
Gadsden, Fla.	3	.5
Middlesex, N. J.	2	.4

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Total Above Counties	150	27.1
Industry Total	411	27.7
% of U. S.	36.5	97.8
*2131—Chewing and Smoking Tobacco		
Forsyth, N. C.	3	2.3
Richmond, Va.	3	.7
Ohio, W. Va.	1	.7
St. Louis City, Mo.	4	.6
Shelby, Tenn.	2	.4
Cook, Ill.	1	.4
Middlesex, N. J.	1	.3
Davidson, Tenn.	3	.3
Wayne, Mich.	3	.2
Petersburg, Va.	1	.2
Warren, Ky.	1	.2
Jefferson, Ky.	2	.2

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Lucas, Ohio	1	.1
Sumner, Tenn.	1	.1
Total Above Counties	27	6.7
Industry Total	65	6.7
% of U. S.	41.5	100.0
*2141—Tobacco Stemming and Redrying		
Danville, Va.	6	2.0
Durham, N. C.	5	1.5
Richmond, Va.	4	1.4
Forsyth, N. C.	6	1.2
Fayette, Ky.	8	1.2
Pitt, N. C.	5	.9
Rockingham, N. C.	2	.7
Nash, N. C.	3	.6

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Lenoir, N. C.	5	.5
Halifax, Va.	4	.5
Lancaster, Pa.	9	.4
Gadsden, Fla.	3	.4
Wilson, N. C.	4	.4
Jefferson, Ky.	4	.4
Vance, N. C.	1	.4
Norfolk, Va.	1	.4
Granville, N. C.	3	.4
Wayne, N. C.	1	.4
Petersburg, Va.	2	.3
Edgecombe, N. C.	2	.3
Total Above Counties	78	13.4
Industry Total	133	15.0
% of U. S.	58.6	89.3

Manufacture of Textile Mill Products—SIC 22

Selling to SIC 22 . . .

By F. B. PINSON, JR.,
Manager, Purchasing Department,
J. P. Stevens & Co. Inc.

Suppliers to the textile industry should learn how the buying is done and use "the front door."

Most of the larger textile organizations have established central purchasing departments, thus changing the pattern followed by those who sell to the industry. Instead of making many calls on individual plants, suppliers frequently can simplify the procedure by calling on the central purchasing office. However, within the central office a salesman may have to call on several buyer-specialists to cover his complete line.

The industry's low-profit margins create constant pressure for cost reduction. In line with this, the caliber of personnel is being raised in many purchasing departments. If today's salesman is to be a top producer, he must be able to match this more critical buying power with improved knowledge and skills of his own.

Manufacturers supplying the industry should recognize that a buying territory frequently encompasses more than one sales territory; they should be organized for smooth handling of all transactions involving goods bought in one sales area and shipped to another.

New products are being greeted with great interest in the textile field and prospects need prompt information about them . . . Materials-handling equipment continues to offer opportunity to alert suppliers . . . Sizing materials for the newer synthetic yarns and fibers offer promise for better and lower-cost products.

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 22

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2211—Scouring and Combing Plant		
Providence, R. I.	12	.1
Middlesex, Mass.	10	.9
Worcester, Mass.	8	.7
Philadelphia, Pa.	6	.7
Bibb, Ga.	1	.4
Essex, Mass.	4	.3
Bristol, Mass.	1	.2
Norfolk, Mass.	4	.2
Passaic, N. J.	3	.2
Hampden, Mass.	1	.2
Dallas, Tex.	2	.2
Florence, S. C.	2	.1

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Total Above Counties	54	5.2
ndustry Total	73	5.3
% of U. S.	74.0	98.1
*2212—Yarn Mills, Wool, Except Carpet		
Providence, R. I.	35	4.0
Middlesex, Mass.	8	1.1
Cleveland, N. C.	1	1.0
Philadelphia, Pa.	11	.8
Gaston, N. C.	5	.7

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
McCormick, S. C.	1	.6
Chautauqua, N. Y.	1	.6
Worcester, Mass.	14	.6
Coweta, Ga.	1	.6
Delaware, Pa.	4	.5
Hillsborough, N. H.	5	.5
Caldwell, N. C.	1	.3
Multnomah, Ore.	1	.3
Ogle, Ill.	1	.3
Bristol, R. I.	2	.3
Windham, Conn.	1	.3
Berkshire, Mass.	2	.2
Tolland, Conn.	2	.2

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Allegheny, Pa.	1	.1
Randolph, N. C.	1	.1
Total Above Counties	98	13.1
Industry Total	171	14.4
% of U. S.	57.3	91.0
*2213—Woolen and Worsted Fabric		
Worcester, Mass.	25	4.3
Surry, N. C.	2	2.4

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Providence, R. I.	31	2.3
Passaic, N. J.	6	2.3
Bergen, N. J.	3	2.3
Essex, Mass.	10	2.2
Philadelphia, Pa.	22	1.8
Cuyahoga, Ohio	2	1.6
Albany, N. Y.	1	1.5
Walker, Ga.	1	1.4
Kennebec, Me.	5	1.2
Cheshire, N. H.	5	1.2
Hamilton, Tenn.	1	1.2
Middlesex, Mass.	4	1.0
Tolland, Conn.	7	1.0
Berkshire, Mass.	4	1.0

* Old SIC Code.

©SM, 1959.

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 22 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Norfolk, Mass.	5	1.0
Androscoggin, Me.	4	.9
Strafford, N. H.	5	.8
Penobscot, Me.	6	.7
Total Above Counties	148	32.1
Industry Total	341	50.6
% of U. S.	43.4	63.4
*2216—Finished Wool Textiles		
Philadelphia, Pa.	8	.7
Passaic, N. J.	1	.6
Providence, R. I.	7	.3
Portage, Ohio	1	.3
Anderson, S. C.	1	.3
Merrimack, N. H.	1	.3
Kings, N. Y.	6	.3
Bucks, Pa.	1	.2
Campbell, Va.	1	.1
Total Above Counties	27	3.1
Industry Total	52	3.3
% of U. S.	51.9	93.9
*2222—Yarn Throwing Mills		
Hamilton, Tenn.	1	3.0
Lackawanna, Pa.	12	1.8
Luzerne, Pa.	9	1.1
Forsyth, N. C.	2	.4
Erie, N. Y.	3	.4
Davidson, N. C.	1	.3
Orange, Va.	1	.3
Passaic, N. J.	8	.3
Philadelphia, Pa.	4	.3
Washington, Tenn.	1	.2
Union, Pa.	2	.2
Lehigh, Pa.	2	.2
Columbia, Pa.	6	.2
Middlesex, Mass.	1	.2
Bradley, Tenn.	1	.2
Anderson, S. C.	1	.2
Guilford, N. C.	1	.2
Providence, R. I.	6	.2
Cook, Ill.	1	.2
Alamance, N. C.	3	.2
Total Above Counties	66	10.1
Industry Total	137	10.5
% of U. S.	48.2	96.2
*2223—Thread Mills		
Windham, Conn.	2	1.7
Gaston, N. C.	5	1.4
Stephen, Ga.	1	1.1
Cobb, Ga.	2	.8
Whitfield, Ga.	1	.6
York, S. C.	1	.6
Hamilton, Tenn.	1	.6
Dougherty, Ga.	1	.5
McDowell, N. C.	1	.5
Mitchell, Ga.	1	.3
Haralson, Ga.	1	.3
Cleveland, N. C.	1	.3
New York, N. Y.	23	.3
Sullivan, Tenn.	1	.3
Thomas, Ga.	1	.3
Litchfield, Conn.	1	.3
Queens, N. Y.	2	.3
Providence, R. I.	4	.3
Middlesex, Mass.	4	.3
Berkshire, Mass.	1	.2
Total Above Counties	55	11.0
Industry Total	97	11.9
% of U. S.	56.7	92.4
*2224—Yarn Mills, Cotton and Silk System		
Gaston, N. C.	55	13.5
Stanly, N. C.	4	3.7
Hamilton, Tenn.	2	3.4
Upson, Ga.	2	3.3
Rowan, N. C.	8	3.0
Hamblen, Tenn.	2	2.7
Bibb, Ga.	7	2.0
Talladega, Ala.	5	2.0
Cleveland, N. C.	12	2.0
Newton, Ga.	2	1.8
Carter, Tenn.	1	1.8
Lincoln, N. C.	7	1.7
Muscogee, Ga.	3	1.7
Troup, Ga.	3	1.7
Calhoun, Ala.	5	1.7
Providence, R. I.	7	1.5
Fairfield, S. C.	1	1.4
Polk, Ga.	3	1.4
Vance, N. C.	2	1.4
Caldwell, N. C.	9	1.3
Total Above Counties	140	53.0
Industry Total	357	81.0
% of U. S.	39.2	65.4
*2233—Cotton Broad-Woven Fabric		
Cabarrus, N. C.	9	17.8
Spartanburg, S. C.	23	13.5
Anderson, S. C.	16	11.0
Danville, Va.	1	10.5
Muscogee, Ga.	5	8.4
Bristol, Mass.	17	7.0
Lancaster, S. C.	2	6.3
Greenville, S. C.	13	6.0
Guilford, N. C.	5	5.0
Chamber, Ala.	4	4.4
Fulton, Ga.	5	4.2
Troup, Ga.	5	4.0
Greenwood, S. C.	4	4.0
Rutherford, N. C.	9	4.0
Androscoggin, Me.	3	4.0
Oconee, S. C.	5	4.0
Union, S. C.	6	4.0
Spalding, Ga.	4	3.5
Aiken, S. C.	2	3.4
Hall, Ga.	3	3.0
Total Above Counties	141	126.0
Industry Total	582	251.5
% of U. S.	24.2	50.9
*2234—Synthetic Broad-Woven Fabrics		
Greenville, S. C.	9	6.6
Bristol, Mass.	24	3.4
Warren, Va.	2	3.2
Davidson, N. C.	3	2.8
Spartanburg, S. C.	3	2.2
Greenwood, S. C.	4	2.2
Campbell, Va.	1	2.1
Rutherford, N. C.	2	1.9
Providence, R. I.	26	1.6
York, Me.	1	1.6
Anderson, S. C.	7	1.5
Luzerne, Pa.	14	1.5
Alamance, N. C.	5	1.5
Cleveland, N. C.	5	1.4
Lehigh, Pa.	25	1.3
Hartford, Conn.	1	1.3
Hillsborough, N. H.	6	1.3
Moore, N. C.	3	1.3
Chamber, Ala.	1	1.2
New London, Conn.	5	1.2
Total Above Counties	147	41.1
Industry Total	478	75.2
% of U. S.	30.8	54.7
*2241—Narrow Fabric Mills		
Philadelphia, Pa.	27	1.6
Passaic, N. J.	45	1.2
New York, N. Y.	68	.9
Washington, R. I.	5	.9
Lycoming, Pa.	4	.9
Berks, Pa.	3	.8
Hampshire, Mass.	3	.8
Bristol, Mass.	10	.7
Fairfield, Conn.	7	.6
York, Pa.	7	.5
Washington, Md.	5	.5
Middlesex, Mass.	13	.5
Middlesex, Conn.	4	.5
Monroe, N. Y.	3	.5
Norfolk, Mass.	4	.4
Bergen, N. J.	14	.4
Patrick, Va.	1	.4
Chatham, N. C.	1	.4
Suffolk, Mass.	3	.4
Calhoun, Ala.	2	.3
Total Above Counties	229	13.2
Industry Total	508	23.9
% of U. S.	45.1	55.2
*2251—Full-Fashioned Hosiery Mills		
Berks, Pa.	81	3.8
Alamance, N. C.	23	3.6
Randolph, N. C.	28	2.4
Mecklenburg, N. C.	18	2.4
Montgomery, Pa.	50	1.7
Burke, N. C.	9	1.6
Gaston, N. C.	7	1.4
Guilford, N. C.	12	1.3
Bucks, Pa.	65	1.3
Henry, Va.	2	1.3
Northampton, Pa.	5	1.1
Hamilton, Tenn.	6	1.0
Milwaukee, Wis.	4	1.0
Cabarrus, N. C.	6	.9
Stanly, N. C.	1	.8
Muscogee, Ga.	2	.8
Cobb, Ga.	2	.7
Queens, N. Y.	3	.7
Campbell, Va.	1	.7
Philadelphia, Pa.	13	.4
Total Above Counties	338	29.9
Industry Total	748	56.5
% of U. S.	45.2	52.9
*2252—Seamless Hosiery Mills		
Guilford, N. C.	29	6.9
Catawba, N. C.	62	4.9
Forsyth, N. C.	8	4.0
Hamilton, Tenn.	17	2.4
Alamance, N. C.	33	2.2
Davidson, N. C.	23	2.2
Surry, N. C.	11	2.1
Roane, Tenn.	3	2.1
Randolph, N. C.	13	1.9
Burke, N. C.	17	1.5
Loudon, Tenn.	2	1.3
Berkeley, W. Va.	1	1.3
McMinn, Tenn.	14	1.2
De Kalb, Ala.	13	1.2
Berks, Pa.	27	1.0
Carroll, Ga.	12	1.0
Cobb, Ga.	3	1.0
Anderson, Tenn.	1	1.0
Montgomery, N. C.	8	.8
Philadelphia, Pa.	10	.8
Total Above Counties	327	40.8
Industry Total	607	59.3
% of U. S.	53.9	68.8
*2253—Knit Outerwear Mills		
Kings, N. Y.	253	7.6
Philadelphia, Pa.	60	7.3
New York, N. Y.	225	5.0
Hudson, N. J.	50	2.1
Queens, N. Y.	108	1.9
Cuyahoga, Ohio	14	1.8
Multnomah, Ore.	3	1.2
Montgomery, Pa.	5	1.0
Blair, Pa.	1	1.0
Middlesex, Mass.	7	.8
Hillsborough, N. H.	6	.8
Martinsville, Va.	4	.8
Roanoke City, Va.	1	.7
Oneida, N. Y.	1	.7
Tallapoosa, Ala.	1	.7
Bristol, Mass.	3	.6
Lebanon, Pa.	4	.6
Essex, N. J.	13	.6
Schuylkill, Pa.	6	.6
Milwaukee, Wis.	5	.6
Total Above Counties	770	36.4
Industry Total	1,077	44.1
% of U. S.	71.5	82.5
*2254—Knit Underwear Mills		
Knox, Tenn.	2	3.5
Forsyth, N. C.	2	3.4
Schuylkill, Pa.	21	1.9
Berks, Pa.	15	1.6
Hennepin, Minn.	1	1.5
Oneida, N. Y.	5	1.4
Lamar, Ga.	1	1.4
Lancaster, Pa.	2	1.0
Rockingham, N. C.	1	.8
Miami, Ohio	2	.8
Bradford, Pa.	1	.8
Pike, Miss.	1	.8
Taylor, Ky.	1	.8
Bartow, Ga.	1	.8
Kenosha, Wis.	1	.8
Lauderdale, Ala.	1	.7
Wyoming, N. Y.	3	.7
Chester, Pa.	4	.5
Hamilton, Tenn.	2	.4
Philadelphia, Pa.	3	.3
Total Above Counties	70	23.9
Industry Total	149	29.8
% of U. S.	47.0	80.2
*2255—Knit Glove Mills		
Warren, N. Y.	1	.4
Outagamie, Wis.	1	.4
Fulton, N. Y.	3	.2
Schenectady, N. Y.	2	.2
Westchester, N. Y.	3	.1
Saratoga, N. Y.	2	.1
Total Above Counties	12	1.4
Industry Total	29	1.9
% of U. S.	41.4	73.7
*2256—Knit Fabric Mills		
New York, N. Y.	58	.8
Northampton, Pa.	4	.8
Hamilton, Tenn.	1	.8
Clarke, Ala.	1	.7
Philadelphia, Pa.	12	.7
Dyer, Tenn.	1	.7
Ulster, N. Y.	2	.7
Kings, N. Y.	40	.6
Gaston, N. C.	6	.6
Middlesex, Mass.	5	.5
Montgomery, N. Y.	6	.5
Fulton, N. Y.	6	.4
Lehigh, Pa.	11	.4
Alamance, N. C.	6	.4
Duplin, N. C.	1	.4
Autauga, Ala.	1	.4
Providence, R. I.	7	.4
Luzerne, Pa.	3	.4
Hampden, N. H.	4	.4
Litchfield, Conn.	1	.4
Total Above Counties	176	11.0
Industry Total	342	16.3
% of U. S.	51.5	67.5
*2259—Knitting Mills, N.E.C.		
Philadelphia, Pa.	4	.4
Cook, Ill.	1	.2
Bergen, N. J.	1	.2
Scotland, N. C.	1	.1
Albany, N. Y.	4	.1
Total Above Counties	11	1.0
Industry Total	46	1.2
% of U. S.	23.9	83.3
*2261—Finishing Textiles, Except Wool		
Passaic, N. J.	96	7.5
Providence, R. I.	31	5.4
York, S. C.	2	4.2
Bristol, Mass.	26	2.9
Greenville, S. C.	4	2.8
Spartanburg, S. C.	2	2.7
Greenwood, S. C.	1	2.6
Chamber, Ala.	1	2.4
Bergen, N. J.	19	2.2
Hamilton, Tenn.	4	2.0
Kent, R. I.	8	1.8
New London, Conn.	10	1.7
Philadelphia, Pa.	29	1.6
Aiken, S. C.	4	1.5
New York, N. Y.	110	1.4

* Old SIC Code.

©SM, 1959.

Manufacture of Textile Mill Products—SIC 22—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 22 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Guilford, N. C.	3	1.4
Berkshire, Mass.	3	1.1
Kings, N. Y.	48	1.1
Hudson, N. J.	29	1.1
New Castle, Del.	1	1.1
Total Above Counties	431	48.5
Industry Total	725	76.3
% of U. S.	59.4	63.6
***2271—Wool Carpets and Rugs**		
Montgomery, N. Y.	2	5.1
Philadelphia, Pa.	21	3.7
Hartford, Conn.	2	2.3
Rockbridge, Va.	1	2.3
Columbia, Pa.	1	1.9
Cook, Ill.	2	1.2
Montgomery, Pa.	3	1.1
Orange, N. Y.	2	1.1
Cumberland, Pa.	1	1.0
Monmouth, N. J.	3	.9
Passaic, N. J.	1	.6
Middlesex, Mass.	1	.6
Washington, Miss.	1	.6
Union, N. J.	1	.6
Mercer, N. J.	2	.5
Worcester, Mass.	6	.4
Cayuga, N. Y.	2	.4
Bucks, Pa.	2	.2
Fresno, Cal.	1	.2
Pitt, N. C.	1	.2
Total Above Counties	56	24.9
Industry Total	93	25.3
% of U. S.	60.2	98.4
***2273—Carpets and Rugs—Except Wool**		
Troup, Ga.	1	1.6
Los Angeles, Cal.	25	.7
Gordon, Ga.	7	.6
Winnebago, Wis.	2	.5
Delaware, Pa.	2	.3
Davidson, Tenn.	1	.2
Walker, Ga.	3	.2
Providence, R. I.	10	.2
Jennings, Ind.	1	.2
Hennepin, Minn.	1	.2
Charlotte, Va.	1	.2
Montgomery, N. C.	1	.2
Greenville, S. C.	1	.2
Catoosa, Ga.	2	.2
Drew, Ark.	1	.2
Polk, Ore.	1	.2
Philadelphia, Pa.	11	.2
Chattooga, Ga.	1	.2
Lackawanna, Pa.	4	.1
Monroe, Tenn.	2	.1
Total Above Counties	78	6.5
Industry Total	213	10.3
% of U. S.	36.6	63.1
***2274—Hard-Surface Floor Coverings**		
Lancaster, Pa.	1	3.8
Norfolk, Mass.	1	.8
Hudson, N. J.	1	.7
Delaware, Pa.	1	.7
Alameda, Cal.	1	.7
Mercer, N. J.	1	.7
New Castle, Del.	1	.4
Salem, N. J.	1	.4
Androscoggin, Me.	1	.3
New London, Conn.	1	.3
Hamilton, Ohio	1	.2
Kennebec, Me.	1	.2
Middlesex, N. J.	1	.2
Lehigh, Pa.	1	.1
Philadelphia, Pa.	1	.1
Total Above Counties	15	9.6
Industry Total	16	9.6
% of U. S.	93.8	100.0
***2281—Fur Felt Hats and Hat Bodies**		
Fairfield, Conn.	16	2.6
Philadelphia, Pa.	3	1.8
Northumberland, Pa.	1	.3
New York, N. Y.	25	.3
Dallas, Tex.	2	.3
Berks, Pa.	3	.2
La Porte, Ind.	1	.2
Franklin, Mo.	1	.2
Essex, N. J.	6	.1
Total Above Counties	65	6.0
Industry Total	92	6.2
% of U. S.	70.7	96.8
***2282—Wool Felt Hats and Hat Bodies**		
Fairfield, Conn.	2	.6
Essex, Mass.	1	.5
Lancaster, Pa.	3	.4
New York, N. Y.	12	.1
Total Above Counties	18	1.6
Industry Total	32	1.6
% of U. S.	56.3	100.0
***2283—Straw Hats**		
St. Louis, Mo.	2	.4
New York, N. Y.	28	.4
Baltimore City, Md.	1	.3
Franklin, Tenn.	1	.2
Webb, Tex.	2	.1
St. Clair, Ill.	2	.1
Total Above Counties	34	1.5
Industry Total	48	1.6
% of U. S.	70.8	93.8
***2284—Hatters' Fur**		
Fairfield, Conn.	18	.3
Essex, N. J.	8	.3
Total Above Counties	26	.6
Industry Total	30	.7
% of U. S.	86.7	85.7
***2291—Felt Goods, N.E.C.**		
Cook, Ill.	7	.7
Vance, N. C.	1	.6
Los Angeles, Cal.	6	.4
Wayne, Mich.	1	.4
Chester, Pa.	1	.4
Orange, N. Y.	1	.4
Essex, N. J.	4	.3
Williamson, Ill.	1	.3
Worcester, Mass.	1	.3
Miami, Ohio	1	.3
Norfolk, Mass.	2	.3
Fairfield, Conn.	1	.2
Broome, N. Y.	1	.2
Milwaukee, Wis.	1	.2
Norfolk, Va.	1	.2
Philadelphia, Pa.	3	.2
Racine, Wis.	1	.1
Total Above Counties	35	5.1
Industry Total	71	5.1
% of U. S.	49.3	100.0
***2292—Lace Goods**		
Providence, R. I.	11	1.0
Philadelphia, Pa.	5	.8
Kent, R. I.	36	.6
Lackawanna, Pa.	1	.6
Bronx, N. Y.	5	.4
New York, N. Y.	20	.4
Suffolk, N. Y.	3	.3
Passaic, N. J.	8	.3
Washington, R. I.	6	.2
Fairfield, Conn.	2	.2
Bristol, R. I.	2	.2
Lorain, Ohio	1	.2
Middlesex, Conn.	2	.2
Somerset, N. J.	1	.2
Mercer, N. J.	3	.1
Hudson, N. J.	10	.1
Total Above Counties	116	5.8
Industry Total	138	6.0
% of U. S.	84.1	96.7
***2293—Paddings and Upholstery Filling**		
Union, N. J.	2	.6
Cook, Ill.	20	.6
Wayne, Mich.	8	.6
Hamilton, Ohio	2	.4
St. Louis, Mo.	2	.4
Richmond, Ga.	1	.4
Genesee, Mich.	1	.4
La Porte, Ind.	2	.4
Mecklenburg, N. C.	2	.4
Dallas, Tex.	4	.2
Philadelphia, Pa.	5	.2
Providence, R. I.	2	.2
Kings, N. Y.	12	.2
Saratoga, N. Y.	1	.2
Oakland, Mich.	1	.2
Cherokee, S. C.	1	.2
Stark, Ohio	1	.2
Williamson, Tex.	1	.2
Niagara, N. Y.	2	.2
Alameda, Cal.	1	.1
Total Above Counties	71	6.3
Industry Total	197	7.6
% of U. S.	36.0	82.9
***2294—Processed Textile Waste**		
Albany, N. Y.	9	.6
Baltimore City, Md.	6	.4
Middlesex, Mass.	9	.3
Norfolk, Mass.	9	.3
Philadelphia, Pa.	11	.2
Fulton, Ga.	1	.2
Winona, Minn.	1	.2
Butler, Ohio	1	.2
St. Louis City, Mo.	4	.2
Chamber, Ala.	1	.2
Worcester, Mass.	13	.2
Penobscot, Me.	2	.2
Rensselaer, N. Y.	1	.2
Mecklenburg, N. C.	4	.2
Bristol, Mass.	5	.1
Providence, R. I.	11	.1
Essex, Mass.	5	.1
Greene, Ohio	2	.1
Total Above Counties	95	4.0
Industry Total	200	5.2
% of U. S.	47.5	76.9
***2295—Coated Fabrics, Except Rubberized**		
Essex, N. J.	8	1.2
Orange, N. Y.	2	1.0
Franklin, Ohio	1	.6
Cook, Ill.	2	.6
Frederick, Va.	1	.6
Norfolk, Mass.	4	.4
Lucas, Ohio	2	.4
Worcester, Mass.	4	.3
Middlesex, Mass.	6	.3
Sullivan, Tenn.	2	.3
Westchester, N. Y.	2	.2
Morris, N. J.	2	.2
Chautauqua, N. Y.	1	.2
Wayne, Mich.	1	.2
Kent, R. I.	1	.2
Middlesex, N. J.	2	.2
Dane, Wis.	1	.2
Sullivan, Tenn.	1	.2
Mercer, N. J.	1	.2
Suffolk, Mass.	6	.1
Total Above Counties	51	7.8
Industry Total	106	8.1
% of U. S.	48.1	96.3
***2298—Cordage and Twine**		
Calhoun, Ala.	2	1.3
Kings, N. Y.	5	.8
Cayuga, N. Y.	2	.8
Plymouth, Mass.	1	.6
Newton, Ga.	1	.6
Cortland, N. Y.	3	.5
Orleans, La.	3	.4
Caldwell, N. C.	2	.4
Middlesex, Mass.	2	.3
Kent, Mich.	2	.3
Burlington, N. J.	1	.3
St. Louis City, Mo.	3	.3
Baltimore City, Md.	1	.3
Hudson, N. J.	2	.2
Jefferson, Ky.	1	.2
Clarke, Ga.	1	.2
Greene, Ohio	2	.2
Washington, R. I.	1	.2
Cook, Ill.	4	.2
Total Above Counties	39	8.1
Industry Total	137	10.1
% of U. S.	28.5	80.2
***2299—Textile Goods, N.E.C.**		
Philadelphia, Pa.	12	1.0
Passaic, N. J.	5	.6
Cook, Ill.	3	.6
Hampden, Mass.	1	.6
Lehigh, Pa.	1	.3
New Castle, Del.	1	.3
Essex, Mass.	2	.3
Hudson, N. J.	2	.3
York, Pa.	1	.3
Worcester, Mass.	1	.3
Pulaski, Ark.	1	.3
Luzerne, Pa.	1	.2
Sunflower, Miss.	1	.2
Anderson, S. C.	1	.2
Martin, Minn.	1	.2
Gaston, N. C.	2	.2
Providence, R. I.	6	.2
New York, N. Y.	16	.2
Jeff Davis, Ga.	1	.2
Middlesex, Mass.	2	.2
Total Above Counties	61	6.7
Industry Total	106	7.8
% of U. S.	56.5	85.9

* Old SIC Code.

©SM, 1959.

Manufacture of Apparel & Related Products—SIC 23

Selling to SIC 23 . . .

By **DAVID ZELINKA**
President
Zelinka-Matlick

Those who sell to the apparel industry must know every facet of the industry, must have complete knowledge of their products, and must know how these products apply to the industry's needs.

Unlike the industries in which large firms dominate, the apparel field is composed primarily of relatively small companies. Apparel firms doing more than $10 million annually are the exception. The majority, in fact, do less than $1 million.

As a consequence, the principal has a many-sided task. The salesmen who can serve him best—and therefore fare best themselves—are those who can give him full and immediate information about their products. It is important that when a prospect asks a question, he receive an authoritative on-the-spot answer.

Ours is a volatile, exciting business. Each season poses its own challenge. Each is like the opening of a new Broadway production. For this reason, time is important. Countless decisions are made every day. Therefore, we expect better-than-ordinary selling.

We expect and need counsel from the men who call on us. The salesmen who do the best job are those with the most know-how concerning the factors that govern end-use of their product. "I'll let you know" is not a sales-building answer to a query.

Perhaps in selling large corporations this instant and thorough knowledge is not necessary to the degree that it is in our case. The big companies have research departments and testing laboratories of their own through which answers on usage and service of components can be obtained. But our salesmen must come with research already accomplished.

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 23

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2311A—Manufacturers of Men's and Boys' Suits and Coats		
Cook, Ill.	27	7.8
Monroe, N. Y.	5	6.8
Philadelphia, Pa.	41	6.3
New York, N. Y.	90	5.0
Kings, N. Y.	11	4.3
Cuyahoga, Ohio	8	4.2
Baltimore City, Md.	20	2.7
Graves, Ky.	2	2.5
Los Angeles, Cal.	33	2.5
Suffolk, Mass.	34	2.5
St. Louis City, Mo.	10	2.0
Knox, Tenn.	2	2.0
Hamilton, Ohio	14	1.6
Haralson, Ga.	1	1.3
Bristol, Mass.	7	1.3
Orleans, La.	6	1.2
Monmouth, N. J.	1	1.0
Erie, N. Y.	7	1.0
Richmond, Va.	1	1.0
Northampton, Pa.	1	.6
Total Above Counties	321	57.6
Industry Total	440	61.8
% of U. S.	73.0	94.8
*2311B—Jobbers of Men's and Boys' Suits and Coats		
New York, N. Y.	234	3.1
Baltimore City, Md.	29	1.7
Philadelphia, Pa.	37	1.2
St. Louis City, Mo.	1	.4
Hamilton, Ohio	3	.2
Monroe, N. Y.	2	.2
Cuyahoga, Ohio	1	.2
Cook, Ill.	14	.2
Suffolk, Mass.	15	.1
Total Above Counties	336	7.3
Industry Total	365	7.7
% of U. S.	92.1	94.8
*2311C—Contractors of Men's and Boys' Suits and Coats		
Philadelphia, Pa.	51	6.0
New York, N. Y.	89	4.7
Kings, N. Y.	59	4.2
Baltimore City, Md.	37	2.1
Montgomery, Pa.	9	1.6
Monroe, N. Y.	6	1.2
Cumberland, N. J.	7	1.2
Franklin, Pa.	1	1.0
Barnwell, S. C.	1	1.0
Passaic, N. J.	13	.9
Carroll, Md.	4	.8
Suffolk, Mass.	21	.8
Boyle, Ky.	1	.7
Carroll, Ga.	1	.7
Frederick, Md.	3	.7
Onondaga, N. Y.	1	.7
Huntingdon, Pa.	1	.7
Lehigh, Pa.	1	.7
Staunton, Va.	1	.7
Cook, Ill.	34	.6
Allen, Ind.	1	.6
Total Above Counties	342	31.6
Industry Total	491	37.9
% of U. S.	69.7	83.4
*2311D—Men's and Boys' Suits and Coats—N.E.C.		
Monroe, N. Y.	1	1.0
New York, N. Y.	2	.5
Cook, Ill.	2	.4
Philadelphia, Pa.	2	.4
Montgomery, Pa.	1	.2
Kings, N. Y.	1	.2
Total Above Counties	9	2.7
Industry Total	14	2.9
% of U. S.	64.3	93.1
*2312—Suit and Coat Findings		
New York, N. Y.	46	.8
Philadelphia, Pa.	10	.6
Baltimore City, Md.	5	.2
Cook, Ill.	8	.2
Luzerne, Pa.	1	.2
Kings, N. Y.	8	.1
Total Above Counties	78	2.1
Industry Total	109	2.5
% of U. S.	71.6	84.0
*2321—Men's Dress Shirts and Nightwear		
New York, N. Y.	215	5.4
Los Angeles, Cal.	84	4.5
Schuylkill, Pa.	18	3.0
Luzerne, Pa.	7	2.2
Rensselaer, N. Y.	6	2.1
Covington, Ala.	2	2.1
Lehigh, Pa.	16	1.9
Cannon, Tenn.	2	1.9
Northumberland, Pa.	6	1.9
Franklin, Pa.	1	1.8
Greenville, S. C.	7	1.7
Baltimore City, Md.	6	1.7
Fulton, Ga.	6	1.7
Bristol, Mass.	8	1.6
Lycoming, Pa.	3	1.5
York, Pa.	9	1.5
White, Tenn.	2	1.3
Spartanburg, S. C.	3	1.3
Ulster, N. Y.	6	1.1
Columbia, Pa.	4	1.1
Total Above Counties	409	41.3
Industry Total	970	115.7
% of U. S.	42.2	35.7
*2322—Men's and Boys' Underwear		
Forsyth, N. C.	1	2.0
Warren, Ky.	1	1.0
Franklin, Ky.	1	.7
Lehigh, Pa.	7	.6
Richland, S. C.	1	.6
Wilkes, Ga.	1	.5
Johnston, N. C.	1	.5
St. Louis, Minn.	1	.4
Bourbon, Ky.	1	.4
Warrick, Ind.	2	.3
Rhea, Tenn.	2	.3
New York, N. Y.	10	.3
Osage, Okla.	1	.3
Chickasaw, Miss.	1	.3
Butler, Ala.	1	.3
Cobb, Ga.	1	.2
Greenwood, S. C.	2	.2
Rowan, N. C.	1	.2
Alleghany, N. C.	1	.2
Washington, Va.	1	.2
Total Above Counties	38	9.6
Industry Total	82	9.6
% of U. S.	46.3	99.0
*2323—Men's and Boys' Neckwear		
New York, N. Y.	182	3.8
Orleans, La.	2	.4
Philadelphia, Pa.	12	.4
Hamilton, Ohio	3	.4
Los Angeles, Cal.	28	.4
Suffolk, Mass.	16	.3
Cook, Ill.	22	.3
Northampton, Pa.	2	.2
Hudson, N. Y.	8	.2
Kings, N. Y.	17	.2
Rensselaer, N. Y.	1	.2
Monroe, N. Y.	3	.2
Baltimore City, Md.	11	.2
New Hanover, N. C.	1	.2
New Haven, Conn.	5	.2
St. Louis City, Mo.	5	.2
Fairfield, Conn.	2	.1
Total Above Counties	320	7.9
Industry Total	398	9.5
% of U. S.	80.4	83.2
*2325—Men's and Boys' Cloth Hats		
New York, N. Y.	163	2.2
Cook, Ill.	29	.6
St. Louis City, Mo.	12	.5
Crawford, Mo.	1	.4
Philadelphia, Pa.	15	.3
Hudson, N. J.	9	.2
Union, N. J.	1	.2
Fond du Lac, Wis.	1	.2
Daviess, Mo.	2	.1
Kings, N. Y.	15	.1
Scott, Mo.	1	.1
Suffolk, Mass.	16	.1
Denver, Col.	3	.1
Hennepin, Minn.	8	.1

* Old SIC Code.

©SM, 1959.

Manufacture of Apparel & Related Products—SIC 23—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 23 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Jackson, Mo.	5	.1
Jefferson, Ky.	3	.1
Los Angeles, Cal.	16	.1
Total Above Counties	291	5.5
Industry Total	414	6.8
% of U. S.	70.3	80.9
*2326—Hat and Cap Materials		
New York, N. Y.	40	.8
Total Above Counties	49	.8
Industry Total	63	1.0
% of U. S.	77.8	80.0
*2327—Separate Trousers		
New York, N. Y.	179	3.0
Bucks, Pa.	16	1.9
Lackawanna, Pa.	9	1.7
Philadelphia, Pa.	36	1.7
Kings, N. Y.	47	1.6
Baltimore City, Md.	34	1.4
Monroe, Miss.	7	1.4
Barrow, Ga.	6	1.3
Northampton, Pa.	8	1.1
Martinsville, Va.	1	1.0
Luzerne, Pa.	7	.9
Greene, Mo.	4	.8
San Diego, Cal.	5	.8
Los Angeles, Cal.	36	.8
Haralson, Ga.	1	.7
Lake, Ind.	3	.7
Fayette, Pa.	3	.7
McDuffie, Ga.	1	.7
Dickson, Tenn.	1	.7
Dallas, Tex.	6	.7
Total Above Counties	412	23.6
Industry Total	786	54.4
% of U. S.	52.4	43.4
*2328—Work Shirts		
Pulaski, Ark.	2	1.0
Guilford, N. C.	1	.8
Lawrence, Tenn.	1	.6
Habersham, Ga.	1	.5
Prentiss, Miss.	2	.4
Dickson, Tenn.	1	.4
Henry, Tenn.	1	.4
Floyd, Ind.	1	.3
McCracken, Ky.	1	.3
Chester, Tenn.	1	.3
Henderson, Tenn.	1	.3
Union, Miss.	2	.2
Obion, Tenn.	2	.2
Pontotoc, Miss.	2	.2
Davidson, Tenn.	2	.2
Todd, Ky.	1	.2
Buchanan, Mo.	1	.2
Iredell, N. C.	4	.2
Blair, Pa.	1	.2
Jasper, Mo.	1	.2
Total Above Counties	29	7.1
Industry Total	52	7.6
% of U. S.	55.8	93.4
*2329—Men's and Boys' Clothing, N.E.C.		
Philadelphia, Pa.	52	4.5
New York, N. Y.	143	3.8
El Paso, Tex.	8	3.5
Los Angeles, Cal.	40	1.8
Fulton, Ga.	9	1.5
San Francisco, Cal.	31	1.4
Jackson, Mo.	11	1.4
Cook, Ill.	36	1.4
Kings, N. Y.	49	1.4
Suffolk, Mass.	40	1.2
Lynchburg, Va.	3	1.2
Sullivan, Tenn.	2	1.2
Luzerne, Pa.	10	1.0
Barrow, Ga.	4	1.0
Jackson, Ga.	2	1.0
Tarrant, Tex.	4	1.0
Davidson, Tenn.	3	1.0
Guilford, N. C.	3	.9
Mercer, N. J.	4	.9
Essex, Mass.	9	.8
Total Above Counties	463	31.9
Industry Total	1,095	96.0
% of U. S.	42.3	33.2
*2331—Blouses		
New York, N. Y.	393	8.7
Northampton, Pa.	68	3.4
Kings, N. Y.	119	2.9
Los Angeles, Cal.	84	2.3
Bronx, N. Y.	61	1.7
Schuylkill, Pa.	18	1.6
Philadelphia, Pa.	29	1.5
Luzerne, Pa.	16	1.3
Queens, N. Y.	36	1.0
Carbon, Pa.	10	.8
Berks, Pa.	6	.7
Middlesex, N. J.	10	.6
Cook, Ill.	22	.6
Lancaster, Pa.	4	.6
Fairfield, Conn.	11	.6
Suffolk, Mass.	23	.6
Lackawanna, Pa.	10	.6
Lycoming, Pa.	5	.5
Delaware, Pa.	5	.5
Monroe, Pa.	12	.5
Total Above Counties	942	31.0
Industry Total	1,228	41.5
% of U. S.	76.7	74.7
*2333—Dresses, Unit Price		
New York, N. Y.	1,815	51.6
Kings, N. Y.	356	8.8
Los Angeles, Cal.	211	5.1
Luzerne, Pa.	93	4.9
Bronx, N. Y.	177	4.5
Bristol, Mass.	42	4.3
Cook, Ill.	103	4.1
St. Louis City, Mo.	44	3.0
Cuffolk, Mass.	73	2.9
Lestchester, N. Y.	81	2.5
Sackawanna, Pa.	43	2.4
Dallas, Tex.	27	2.4
Philadelphia, Pa.	40	2.3
Schuylkill, Pa.	25	1.9
Hudson, N. J.	54	1.8
Queens, N. Y.	71	1.8
Harnett, N. C.	1	1.8
New Haven, Conn.	37	1.7
Roanoke, Va.	1	1.4
Essex, N. J.	45	1.3
Total Above Counties	3,339	110.5
Industry Total	4,094	136.3
% of U. S.	81.6	81.1
*2334—Dresses, Dozen Price		
New York, N. Y.	145	3.7
Philadelphia, Pa.	47	2.9
Bristol, Mass.	24	2.3
Cook, Ill.	34	1.6
St. Louis City, Mo.	24	1.5
Cuyahoga, Ohio	11	1.4
Roanoke, Va.	3	1.2
Northumberland, Pa.	5	1.2
Jackson, Mo.	9	1.1
Lackawanna, Pa.	18	1.0
Schuylkill, Pa.	5	1.0
Macon, Ill.	7	.9
Baltimore City, Md.	13	.9
Kane, Ill.	3	.8
Florence, S. C.	3	.8
Los Angeles, Cal.	42	.8
Pulaski, Ark.	1	.8
Hamilton, Ohio	2	.7
Cambria, Pa.	1	.7
Kings, N. Y.	38	.6
Total Above Counties	435	25.9
Industry Total	891	52.5
% of U. S.	48.8	49.3
*2337—Women's Suits, Coats and Skirts		
New York, N. Y.	1,348	28.7
Kings, N. Y.	455	9.1
Los Angeles, Cal.	233	6.1
Suffolk, Mass.	115	3.5
Hudson, N. J.	80	2.7
Jackson, Mo.	26	2.5
Passaic, N. J.	60	2.3
Cook, Ill.	82	2.2
Essex, N. J.	46	1.9
San Francisco, Cal.	37	1.5
Baltimore City, Md.	19	1.4
Philadelphia, Pa.	32	1.4
Bronx, N. Y.	54	1.2
Orange, N. Y.	22	1.1
Queens, N. Y.	37	.9
Atlantic, N. J.	15	.8
Bergen, N. J.	26	.8
Cuyahoga, Ohio	17	.8
Cumberland, N. J.	8	.8
Middlesex, N. J.	13	.7
Total Above Counties	2,725	70.4
Industry Total	3,194	94.0
% of U. S.	85.3	74.9
*2338—Women's Neckwear and Scarfs		
New York, N. Y.	88	1.2
Hudson, N. J.	3	.1
Total Above Counties	91	1.3
Industry Total	133	1.9
% of U. S.	68.4	68.4
*2339—Women's Outerwear, N.E.C.		
Los Angeles, Cal.	85	3.8
Kings, N. Y.	81	1.8
Dallas, Tex.	8	1.6
Guilford, N. C.	2	1.1
Suffolk, Mass.	37	1.0
San Francisco, Cal.	19	.7
Baltimore City, Md.	5	.6
Dade, Fla.	9	.5
Hamilton, Ohio	4	.5
Bronx, N. Y.	16	.5
Lehigh, Pa.	7	.5
Caldwell, N. C.	1	.4
Queens, N. Y.	19	.4
Buncombe, N. C.	2	.4
Clark, Wash.	1	.4
Multnomah, Ore.	3	.4
Rensselaer, N. Y.	1	.4
Luzerne, Pa.	2	.4
Sonoma, Cal.	2	.3
Middlesex, N. J.	9	.3
Total Above Counties	313	16.0
Industry Total	710	23.1
% of U. S.	44.1	69.3
*2341—Women's and Children's Underwear		
New York, N. Y.	572	14.5
Kings, N. Y.	121	3.6
Bristol, Mass.	14	2.5
Lancaster, Pa.	22	1.9
Lehigh, Pa.	19	1.5
Cook, Ill.	27	1.4
Montgomery, N. C.	1	1.2
Los Angeles, Cal.	34	1.2
Hampden, Mass.	6	1.2
Greenville, S. C.	4	1.1
Guilford, N. C.	5	1.1
Hamilton, Tenn.	1	1.1
New Haven, Conn.	8	1.0
Hudson, N. J.	26	1.0
Berks, Pa.	12	.9
Northampton, Pa.	8	.9
Lebanon, Pa.	9	.9
St. Louis City, Mo.	7	.8
Pittsburg, Okla.	1	.7
Schuylkill, Pa.	3	.7
Total Above Counties	900	39.2
Industry Total	1,352	74.3
% of U. S.	66.6	52.8
*2342—Corsets and Allied Garments		
New York, N. Y.	152	7.8
Cook, Ill.	19	2.2
Los Angeles, Cal.	46	2.1
Hudson, N. J.	18	2.1
Fairfield, Conn.	13	1.6
Queens, N. Y.	13	1.4
Luzerne, Pa.	5	1.3
Cortland, N. Y.	8	1.2
Kings, N. Y.	34	1.1
Fulton, Ga.	4	.8
Essex, N. J.	8	.8
Worcester, Mass.	5	.8
Morris, N. J.	4	.8
Kent, Del.	1	.7
Mercer, W. Va.	1	.7
New Haven, Conn.	12	.7
Cambria, Pa.	3	.7
Bergen, N. J.	10	.6
Cass, Ind.	1	.4
Cabell, W. Va.	1	.4
Total Above Counties	358	28.2
Industry Total	491	38.7
% of U. S.	72.9	72.9
*2351—Millinery		
New York, N. Y.	574	9.4
Cook, Ill.	42	1.1
Philadelphia, Pa.	12	.7
Middlesex, Mass.	1	.6
Worcester, Mass.	5	.6
Dallas, Tex.	19	.5
Hampden, Mass.	4	.5
Kings, N. Y.	28	.4
Passaic, N. J.	1	.4
Westchester, N. Y.	13	.3
St. Louis City, Mo.	15	.3
Dutchess, N. Y.	3	.3
Los Angeles, Cal.	32	.3
Baltimore City, Md.	5	.3
Milwaukee, Wis.	2	.3
Erie, N. Y.	4	.2
Bronx, N. Y.	11	.2
Fairfield, Conn.	5	.2
Norfolk, Mass.	3	.2
Fulton, Ga.	3	.2
Total Above Counties	782	17.0
Industry Total	885	17.1
% of U. S.	90.4	99.4
*2361—Children's Dresses		
New York, N. Y.	221	7.4
Philadelphia, Pa.	26	2.4
Lackawanna, Pa.	21	1.6

* Old SIC Code.

©SM, 1959.

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 23 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Luzerne, Pa.	11	1.5
Hudson, N. J.	34	1.4
Los Angeles, Cal.	46	1.3
Kings, N. Y.	54	1.1
Carbon, Pa.	5	1.0
Essex, N. J.	29	.8
Montgomery, Pa.	7	.8
Lancaster, Pa.	8	.7
York, Pa.	8	.7
Bexar, Tex.	6	.7
Appomattox, Va.	3	.6
Bristol, Mass.	8	.5
Union, N. J.	5	.4
Dauphin, Pa.	3	.4
Monmouth, N. J.	7	.3
Webb, Tex.	5	.3
Guilford, N. C.	1	.2
Total Above Counties	505	24.1
Industry Total	754	34.5
% of U. S.	67.0	69.9

***2363—Children's Coats**

New York, N. Y.	179	4.8
Passaic, N. J.	22	.9
Philadelphia, Pa.	16	.8
Kings, N. Y.	39	.8
Lancaster, Pa.	5	.8
Middlesex, N. J.	7	.6
Lackawanna, Pa.	6	.5
Manistee, Mich.	2	.4
Bergen, N. J.	12	.4
Hennepin, Minn.	3	.3
Queens, N. Y.	8	.2
Rowan, N. C.	1	.2
Westmoreland, Pa.	1	.2
Monmouth, N. J.	2	.2
Atlantic, N. J.	2	.2
Hartford, Conn.	1	.2
Chittenden, Vt.	1	.2
Hampden, Mass.	2	.2
Essex, N. J.	6	.2
Cobb, Ga.	1	.2
Total Above Counties	316	12.3
Industry Total	401	15.2
% of U. S.	78.8	80.9

***2369—Children's Outerwear, N.E.C.**

New York, N. Y.	307	8.0
Kings, N. Y.	96	2.3
Los Angeles, Cal.	42	1.2
Providence, R. I.	4	1.1
Queens, N. Y.	19	.8
Lehigh, Pa.	9	.7
Lynchburg, Va.	4	.7
Ulster, N. Y.	4	.5
Philadelphia, Pa.	10	.4
Bexar, Tex.	3	.4
Carter, Ky.	1	.4
Wood, W. Va.	1	.4
Knox, Ill.	1	.4
Ramsey, Minn.	3	.4
Cook, Ill.	8	.4
Dauphin, Pa.	1	.3
Bronx, N. Y.	12	.3
Suffolk, N. Y.	7	.3
Luzerne, Pa.	7	.3
Cortland, N. Y.	3	.3
Total Above Counties	542	18.6

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Industry Total	802	31.8
% of U. S.	67.6	61.6

***2371—Fur Goods**

New York, N. Y.	1,722	8.5
Cook, Ill.	60	.3
Los Angeles, Cal.	49	.2
Fulton, N. Y.	14	.1
Philadelphia, Pa.	11	.1
Total Above Counties	1,856	9.2
Industry Total	1,968	9.5
% of U. S.	94.3	96.8

***2381—Fabric Dress Gloves**

Fulton, N. Y.	15	.6
Montgomery, N. Y.	9	.4
New York, N. Y.	32	.4
Kings, N. Y.	11	.3
Chautauqua, N. Y.	1	.3
Cook, Ill.	2	.2
Lackawanna, Pa.	1	.2
Caledonia, Vt.	1	.2
Christian, Ill.	1	.2
Haywood, Tenn.	1	.2
Waupaca, Wis.	1	.2
Peoria, Ill.	1	.2
Tioga, Pa.	3	.1
Total Above Counties	82	3.5
Industry Total	110	3.8
% of U. S.	74.5	92.1

***2382—Fabric Work Gloves**

Catawba, N. C.	4	1.0
Butler, Ala.	1	.7
Wayne, Miss.	1	.4
Massac, Ill.	1	.4
Meshoba, Miss.	1	.4
Jackson, Ill.	1	.4
Marion, Ind.	2	.3
Essex, N. J.	4	.3
Knox, Tenn.	1	.2
Jefferson, Iowa	1	.2
Effingham, Ill.	1	.2
Hancock, Ohio	1	.2
Peoria, Ill.	1	.2
Livingston, Mo.	2	.2
Leavenworth, Kan.	1	.2
Floyd, Ga.	1	.2
Chickasaw, Miss.	1	.2
Webster, Miss.	1	.2
Morgan, Col.	1	.2
Grant, Ind.	1	.2
Total Above Counties	28	6.3
Industry Total	130	10.1
% of U. S.	21.5	62.4

***2383—Suspenders and Garters**

New York, N. Y.	22	.4
Rockingham, N. C.	1	.2
Total Above Counties	23	.6
Industry Total	47	.8
% of U. S.	48.9	75.0

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958

***2384—Robes and Dressing Gowns**

New York, N. Y.	125	2.8
Kings, N. Y.	70	1.5
Bristol, Mass.	7	.6
Whitfield, Ga.	5	.6
Cook, Ill.	11	.4
Schuylkill, Pa.	3	.4
Cumberland, Pa.	2	.3
Los Angeles, Cal.	5	.2
Hudson, N. J.	7	.2
Fairfield, Conn.	6	.2
Providence, R. I.	2	.2
Berkshire, Mass.	1	.2
Bronx, N. Y.	10	.2
Burke, Ga.	1	.2
Calhoun, Ala.	1	.2
Westchester, N. Y.	4	.2
Greenwood, S. C.	2	.1
Lycoming, Pa.	2	.1
Orange, N. Y.	3	.1
Middlesex, N. J.	2	.1
Total Above Counties	269	8.8
Industry Total	328	9.2
% of U. S.	82.0	95.7

***2385—Waterproof Outer Garments**

New York, N. Y.	104	2.8
Suffolk, Mass.	16	1.4
Kings, N. Y.	32	1.2
Racine, Wis.	2	.6
Kent, Del.	1	.6
Middlesex, Mass.	9	.5
Daviess, Ind.	1	.4
Berrien, Mich.	1	.4
Bronx, N. Y.	5	.3
Fulton, Ga.	3	.3
Baltimore City, Md.	1	.2
Pulaski, Va.	1	.2
Broome, N. Y.	1	.2
Lancaster, Pa.	1	.2
Wilkes, Ga.	1	.2
Lehigh, Pa.	2	.1
Mahoning, Ohio	1	.1
Queens, N. Y.	3	.1
Cuyahoga, Ohio	2	.1
Essex, N. J.	3	.1
Total Above Counties	190	10.0
Industry Total	294	12.0
% of U. S.	64.6	83.3

***2386—Leather and Sheep Lined Clothing**

Los Angeles, Cal.	16	.6
Philadelphia, Pa.	3	.4
Suffolk, Mass.	10	.4
Essex, Mass.	7	.4
New York, N. Y.	24	.3
Ramsey, Minn.	2	.2
Milwaukee, Wis.	4	.2
Monmouth, N. J.	2	.2
Cook, Ill.	8	.2
Dauphin, Pa.	1	.2
Middlesex, N. J.	4	.2
Fairfield, Conn.	4	.1
Hudson, N. J.	2	.1
Fulton, N. Y.	3	.1
Kings, N. Y.	6	.1

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
St. Louis City, Mo.	5	.1
Total Above Counties	101	3.8
Industry Total	153	4.6
% of U. S.	66.0	82.6

***2387—Belts**

New York, N. Y.	305	5.6
Monroe, N. Y.	1	.7
Cook, Ill.	20	.6
Los Angeles, Cal.	30	.5
Hudson, N. J.	6	.5
Delaware, Pa.	1	.4
De Witt, Tex.	1	.4
Philadelphia, Pa.	6	.3
Suffolk, Mass.	7	.3
Luzerne, Pa.	5	.3
Cuyahoga, Ohio	1	.2
Middlesex, Mass.	1	.2
Dallas, Tex.	5	.2
Wayne, N. Y.	1	.1
Total Above Counties	390	10.3
Industry Total	496	11.6
% of U. S.	78.6	88.8

***2388—Handkerchiefs**

New York, N. Y.	44	.7
Passaic, N. J.	13	.6
Hudson, N. J.	4	.2
Northampton, Pa.	1	.2
Kings, N. Y.	6	.1
Lebanon, Pa.	2	.1
Bristol, Mass.	1	.1
Rensselaer, N. Y.	1	.1
Greenville, S. C.	2	.1
Total Above Counties	74	2.2
Industry Total	100	2.7
% of U. S.	74.0	81.5

***2389—Apparel, N.E.C.**

New York, N. Y.	43	1.0
Huron, Ohio	1	.4
Cook, Ill.	8	.3
Fairfield, Conn.	1	.2
Washington, Pa.	1	.2
Bond, Ill.	1	.2
Los Angeles, Cal.	8	.2
Philadelphia, Pa.	12	.2
Montgomery, Pa.	3	.1
Champaign, Ill.	1	.1
Total Above Counties	79	2.9
Industry Total	145	3.8
% of U. S.	54.5	76.3

***2391—Curtains and Draperies**

New York, N. Y.	175	2.5
Bristol, Mass.	16	2.0
Los Angeles, Cal.	55	.9
Cook, Ill.	63	.7
Suffolk, Mass.	31	.7
Philadelphia, Pa.	16	.6
San Francisco, Cal.	18	.4
Westchester, N. Y.	5	.4
Queens, N. Y.	7	.4
Passaic, N. J.	5	.4

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
St. Louis City, Mo.	9	.3
Kings, N. Y.	29	.3
Allegheny, Pa.	14	.3
Bronx, N. Y.	12	.3
Hampden, Mass.	3	.3
Windham, Conn.	3	.3
Dallas, Tex.	5	.2
Middlesex, N. J.	1	.2
Dutchess, N. Y.	1	.1
New London, Conn.	1	.1
Total Above Counties	469	11.4
Industry Total	708	13.7
% of U. S.	66.2	83.2

***2392—Housefurnishings, N.E.C.**

New York, N. Y.	276	4.9
Upson, Ga.	1	2.5
Whitfield, Ga.	35	2.4
Cook, Ill.	82	2.2
Kings, N. Y.	118	2.2
Spartanburg, S. C.	1	2.1
Guilford, N. C.	2	1.8
Baltimore City, Md.	17	1.3
Los Angeles, Cal.	59	1.0
Richmond City, Va.	6	1.0
Gordon, Ga.	10	.9
Hall, Ga.	1	.7
Rockingham, N. C.	1	.7
Androscoggin, Me.	1	.7
Hamilton, Tenn.	2	.7
Philadelphia, Pa.	29	.6
Hudson, N. J.	17	.6
Bronx, N. Y.	34	.6
Lehigh, Pa.	4	.6
Essex, N. J.	20	.5
Total Above Counties	716	28.0
Industry Total	1,199	36.4
% of U. S.	59.7	76.9

***2393—Textile Bags**

Harris, Tex.	3	.8
Kings, N. Y.	26	.7
Hennepin, Minn.	7	.7
Orleans, La.	7	.7
Jackson, Mo.	5	.6
Erie, N. Y.	6	.6
Los Angeles, Cal.	6	.5
San Francisco, Cal.	4	.5
Philadelphia, Pa.	9	.4
Multnomah, Ore.	4	.4
New York, N. Y.	3	.4
Douglas, Neb.	1	.4
Marion, Ind.	1	.4
Habersham, Ga.	1	.4
Dallas, Tex.	4	.3
Shelby, Tenn.	4	.3
Cook, Ill.	13	.3
St. Louis City, Mo.	4	.3
Richmond City, Va.	3	.3
Milwaukee, Wis.	1	.2
Total Above Counties	132	9.2
Industry Total	272	11.9
% of U. S.	48.5	77.3

* Old SIC Code.

©SM, 1959.

Manufacture of Apparel & Related Products—SIC 23—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 23 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2394—Canvas Products		
Cook, Ill.	57	.9
Philadelphia, Pa.	30	.6
Cuyahoga, Ohio	14	.5
Knox, Tenn.	4	.4
Los Angeles, Cal.	35	.4
Kings, N. Y.	32	.4
Lucas, Ohio	7	.4
New York, N. Y.	41	.3
Jackson, Mo.	15	.3
St. Louis City, Mo.	20	.3
Fulton, Ga.	9	.2
Richmond City, Va.	7	.2
Vanderbilt, Ind.	1	.2
Howard, Md.	1	.2
Marion, Ind.	9	.2
Norfolk, Va.	8	.2
Huntington, Ind.	1	.2
Queens, N. Y.	13	.2
Allegheny, Pa.	14	.2
Cabell, W. Va.	2	.2
Total Above Counties	321	6.7
Industry Total	1,119	13.7
% of U. S.	28.7	48.9

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2395—Tucking, Pleating and Stitching		
New York, N. Y.	278	3.9
Los Angeles, Cal.	29	.5
Hudson, N. J.	42	.5
Kings, N. Y.	21	.2
Suffolk, Mass.	12	.2
Cook, Ill.	19	.2
Philadelphia, Pa.	8	.1
Total Above Counties	409	5.8
Industry Total	487	6.3
% of U. S.	84.0	88.9
*2396—Trimmings and Art Goods		
New York, N. Y.	482	7.9
Wayne, Mich.	10	1.1
Los Angeles, Cal.	39	.8
St. Louis City, Mo.	12	.7
Worcester, Mass.	4	.7
Hancock, Ohio	1	.7
Philadelphia, Pa.	11	.6
Kings, N. Y.	83	.5
Cook, Ill.	26	.4
Lycoming, Pa.	1	.4
Suffolk, Mass.	13	.3

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Alameda, Cal.	1	.2
Randolph, Ind.	1	.2
Bronx, N. Y.	21	.2
New Haven, Conn.	3	.2
Herkimer, N. Y.	1	.2
Albany, N. Y.	1	.2
Wyoming, N. Y.	1	.2
Hudson, N. J.	18	.2
Monterey, Cal.	1	.2
Total Above Counties	700	15.9
Industry Total	836	17.6
% of U. S.	83.7	90.3
*2397—Schiffli—Machine Embroideries		
Hudson, N. Y.	424	3.9
New York, N. Y.	82	.6
Bergen, N. J.	58	.6
Cook, Ill.	8	.2
Philadelphia, Pa.	4	.1
Total Above Counties	546	5.4
Industry Total	600	6.3

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
% of U. S.	91.0	85.7
*2398—Embroideries, Except Schiffli		
New York, N. Y.	428	6.2
Hudson, N. J.	127	1.0
Los Angeles, Cal.	45	.6
Kings, N. Y.	33	.4
Bronx, N. Y.	25	.4
Philadelphia, Pa.	13	.4
Passaic, N. J.	23	.3
Cook, Ill.	19	.3
Bergen, N. J.	38	.3
Middlesex, N. J.	18	.3
Queens, N. Y.	13	.2
Baltimore City, Md.	5	.2
St. Louis City, Mo.	9	.1
Dade, Fla.	5	.1
Suffolk, Mass.	14	.1
Total Above Counties	815	10.9
Industry Total	922	11.2
% of U. S.	88.4	97.3

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2399—Textile Products, N.E.C.		
New York, N. Y.	154	2.5
Cook, Ill.	57	1.2
Kings, N. Y.	74	1.1
Los Angeles, Cal.	93	1.1
New Haven, Conn.	1	.8
Philadelphia, Pa.	37	.6
Essex, Mass.	9	.5
Sandusky, Ohio	1	.5
Alpena, Mich.	1	.4
Queens, N. Y.	21	.4
Fairfield, Conn.	3	.4
Black Hawk, Iowa	2	.4
Bronx, N. Y.	29	.4
Shelby, Tenn.	5	.4
Jackson, Ga.	1	.4
Westchester, N. Y.	11	.3
Wayne, Mich.	18	.3
Suffolk, Mass.	18	.3
Montgomery, Pa.	2	.2
Hamilton, Ohio	9	.2
Total Above Counties	561	12.9
Industry Total	1,099	17.9
% of U. S.	51.0	72.1

* Old SIC Code.

©SM, 1959.

Manufacture of Lumber & Wood Products—SIC 24

Selling to SIC 24 . . .

By LAWRENCE S. CLARK,
Vice President
Twin City Hardwood Lumber Co.

Lumber is a typical product in that there is little quality control possible because of the natural variation in species, grain and texture. We must accept the product as nature made it, and direct our activities toward most efficient use.

Lumber must be manufactured and used as it comes from the tree, a factor which often confuses buyers and sellers alike. A specialized knowledge is necessary for purchase and use of the product.

The most practical way to buy, in our judgment, is to investigate good sources and determine the best and most reliable by personal experience. This can be expensive, but in this industry, there seems to be no substitute for experience.

The lumber industry is crisscrossed by mill salesmen, wholesalers, jobbers, and others, many working the same sources of supply, some conflicting in the field. There seems little consistency in the sales pattern, each large organization having its own idea of proper distribution and sales effort.

The trend in the industry seems to be away from large sources; there is less dependence on a single source. In other words, exclusive distribution contracts seem to be disappearing in favor of wider distribution in the field and more representation in market areas for various manufacturers. More and more reliance is placed on financial and policy responsibility, brand names, and reputation of product sources.

Salesmen in the lumber industry are notorious for their indifferent or inefficient selling. Some of them know their products, but most depend on catalogs and printed information without having a complete working knowledge of what they're selling. Few are thoroughly familiar with available or anticipated supplies. Regularity of calls is something much to be desired.

A good salesman is invaluable to a purchasing agent. His specialized product knowledge can supplement and clarify the purchaser's thinking. His outside contacts often bring ideas and suggestions unobtainable any other way.

A purchasing agent is a busy man. He always has time to see salesmen, but seldom during business hours does he like to use his time with a "visitor." If more salesmen would recognize this, more calls could be made, more friends kept, and more sales concluded quickly.

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 24

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
***2411—Logging Camps and Logging Contractors**		
Douglas, Ore.	346	2.1
Lane, Ore.	336	1.8
Penobscot, Me.	184	1.3
Humboldt, Cal.	234	1.2
Grays Harbor, Wash.	90	1.2
Somerset, Me.	135	1.1
Linn, Ore.	113	1.0
Coos, Ore.	147	1.0
Jackson, Ore.	132	.7
Oxford, Me.	146	.7
Tillamook, Ore.	105	.7
Aroostook, Me.	100	.7
Mendocino, Cal.	119	.7
Clallam, Wash.	77	.6
St. Louis, Minn.	126	.6
Lewis, Wash.	97	.6
Snohomish, Wash.	122	.6
Piscataquis, Me.	95	.5
Coos, N. H.	53	.5
Clackamas, Ore.	91	.5
Total Above Counties	2,848	18.1
Industry Total	12,865	73.6
% of U. S.	22.1	24.6
***2421—Sawmills and Planing Mills**		
Humboldt, Cal.	177	11.5
Lane, Ore.	201	6.3
Douglas, Ore.	140	3.9
Mendocino, Cal.	104	3.6
Cowlitz, Wash.	26	3.5
Coos, Ore.	98	3.1
Nez Perce, Ida.	7	3.0
Shelby, Tenn.	22	2.7
Jackson, Ore.	60	2.7
King, Wash.	39	2.4
Klamath, Ore.	17	2.2
Snohomish, Wash.	56	2.0
Siskiyou, Cal.	36	2.0
Linn, Ore.	73	1.8
Rapides, La.	23	1.7
Shasta, Cal.	35	1.6
Humboldt, Cal.	2	1.6
Bradley, Ark.	7	1.4
Umatilla, Ore.	15	1.4
Lincoln, Ore.	64	1.4
Total Above Counties	1,202	59.8
Industry Total	19,778	265.0
% of U. S.	6.1	22.6
***2422—Veneer Mills**		
Davidson, N. C.	8	.4
Lane, Ore.	4	.3
Jefferson, Ky.	5	.3
Marion, Ind.	7	.3
Madison, Tenn.	1	.2
Del Norte, Cal.	4	.2
Douglas, Ore.	4	.2
Baldwin, Ala.	2	.2
Forsyth, N. C.	1	.2
Henry, Va.	1	.2
Halifax, N. C.	1	.2
Norfolk, Va.	1	.2
Langlade, Wis.	2	.2
Johnson, Ind.	3	.2
Camden, Ga.	1	.2
Guilford, N. C.	7	.2
Orangeburg, S. C.	4	.2
Coos, N. H.	1	.2
Floyd, Ind.	4	.2
Cook, Ill.	1	.2
Total Above Counties	62	4.5
Industry Total	261	12.1
% of U. S.	23.8	37.2
***2423—Shingle Mills**		
Snohomish, Wash.	16	.6
Grays Harbor, Wash.	22	.3
King, Wash.	10	.2
Lewis, Wash.	9	.2
Skagit, Wash.	16	.2
Clallam, Wash.	5	.1
Cowlitz, Wash.	7	.1
Multnomah, Ore.	3	.1
Total Above Counties	88	1.8
Industry Total	175	2.8
% of U. S.	50.3	64.3
***2424—Cooperage Stock Mills**		
Shannon, Mo.	1	.2
Dallas, Ala.	1	.2
Cullman, Ala.	2	.1
Total Above Counties	4	.5
Industry Total	205	2.9
% of U. S.	2.0	17.2
***2425—Excelsior Mills**		
Kent, Mich.	1	.2
Winnebago, Wis.	1	.2
Total Above Counties	2	.4
Industry Total	68	1.0
% of U. S.	29.4	40.0
***2431—Millwork Plants**		
Los Angeles, Cal.	227	3.4
Cook, Ill.	141	2.5
Winnebago, Wis.	6	1.8
Dubuque, Iowa	5	1.5
Wood, Wis.	3	1.1
Hennepin, Minn.	28	1.1
Washington, Minn.	4	1.1
Queens, N. Y.	34	1.0
Pierce, Wash.	18	1.0
Marathon, Wis.	5	1.0
Jefferson, Ky.	13	.9
Multnomah, Ore.	29	.9
King, Wash.	39	.9
Kings, N. Y.	70	.8
Wayne, Mich.	44	.8
Jones, Miss.	4	.7
Spokane, Wash.	16	.7
Milwaukee, Wis.	35	.7
Muscatine, Iowa	4	.7
Marion, Iowa	1	.7
Total Above Counties	670	23.3
Industry Total	3,348	69.5
% of U. S.	20.0	33.5
***2432—Plywood Plants**		
Linn, Ore.	7	2.0
Humboldt, Cal.	5	2.0
Pierce, Wash.	7	1.8
Douglas, Ore.	8	1.8
Grays Harbor, Wash.	6	1.7
Lane, Ore.	9	1.6
Coos, Ore.	4	1.6
Thurston, Wash.	5	1.3
King, Wash.	5	.9
Snohomish, Wash.	4	.8
Jefferson, Ky.	6	.7
Cowlitz, Wash.	4	.7
Del Norte, Cal.	5	.7
Kewaunee, Wis.	1	.7
Shasta, Cal.	1	.7
Mendocino, Cal.	1	.6
Floyd, Ind.	4	.6
Whatcom, Wash.	3	.6
Chautauqua, N. Y.	3	.5
Chatham, Ga.	2	.5
Total Above Counties	88	21.8
Industry Total	255	39.8
% of U. S.	34.5	54.8
***2433—Prefabricated Wood Products**		
Tippecanoe, Ind.	2	1.6
Multnomah, Ore.	8	.8
Floyd, Ind.	1	.7
Chemung, N. Y.	1	.4
Bay, Mich.	3	.4
Henry, Va.	1	.4
De Kalb, Ala.	1	.4
Butler, Ohio	1	.3
Freeborn, Minn.	4	.3
Sonoma, Cal.	1	.3
Covington, Miss.	1	.2
Ozaukee, Wis.	1	.2
Wayne, Mich.	1	.2
Wyandotte, Kan.	1	.2
Effingham, Ill.	1	.2
Miami, Ohio	1	.2
Marinette, Wis.	1	.2
Lucas, Ohio	3	.2
Lehigh, Pa.	2	.2
Elkhart, Ind.	1	.2
Total Above Counties	36	7.4
Industry Total	231	11.7
% of U. S.	15.6	63.2
***2441—Fruit and Vegetable Baskets**		
Leon, Fla.	1	.7
Hertford, N. C.	1	.6
Sumter, Ga.	2	.4
Portsmouth, Va.	1	.4
New Hanover, N. C.	1	.3
Clarke, Va.	1	.3
Hempstead, Ark.	2	.3
Pulaski, Ark.	1	.2
Peach, S. C.	1	.2
Lauderdale, Tenn.	1	.2
Suffolk, Va.	1	.2
Floyd, Ind.	1	.2
Wicomico, Md.	1	.1
Camp, Tex.	1	.1
Trinity, Tex.	1	.1
Gregg, Tex.	1	.1
Gloucester, N. J.	2	.1
Cuyahoga, Ohio	4	.1
Erie, N. Y.	5	.1
Cherokee, Tex.	2	.1
Total Above Counties	31	4.8
Industry Total	134	5.9
% of U. S.	23.1	81.4
***2442—Rattan and Willow Ware**		
Miami, Ind.	1	.2
Queens, N. Y.	2	.2
New York, N. Y.	11	.1
Total Above Counties	14	.5
Industry Total	75	1.4
% of U. S.	18.7	35.7
***2443—Cigar Boxes**		
York, Pa.	4	.3
Hillsborough, Fla.	1	.3
Middlesex, N. J.	1	.2
Total Above Counties	6	.8
Industry Total	23	1.0
% of U. S.	26.1	80.0
***2444—Wooden Boxes**		
Phillips, Ark.	2	1.0
Cook, Ill.	32	.9
Bibb, Ga.	3	.8
Hamilton, Tenn.	5	.7
Humboldt, Cal.	3	.6
Madison, La.	1	.6
Leon, Fla.	1	.6
Los Angeles, Cal.	38	.6
San Joaquin, Cal.	1	.5
Tangipahoa, La.	4	.5
Worcester, Mass.	13	.4
Claiborne, Miss.	1	.4
Pasco, Fla.	1	.4
Thomas, Ga.	1	.4
Jefferson, Tex.	1	.4
Wayne, Mich.	15	.4
Cheshire, N. H.	6	.4
Tuscaloosa, Ala.	6	.3
Pike, Miss.	1	.3
Copiah, Miss.	2	.3
Total Above Counties	137	10.5
Industry Total	1,088	31.0
% of U. S.	12.5	33.9
***2445—Cooperage**		
Jefferson, Ky.	3	.5
Cuyahoga, Ohio	2	.3
Shelby, Tenn.	1	.2
Cook, Ill.	5	.2
Baltimore City, Md.	4	.2
Venango, Pa.	1	.2
Peoria, Ill.	2	.2
Middlesex, Mass.	4	.2
Vigo, Ind.	1	.1
Pulaski, Ark.	1	.1
Total Above Counties	24	2.2
Industry Total	180	3.2
% of U. S.	13.3	68.8
***2491—Wood Preserving**		
Escambia, Ala.	1	.6
Spartanburg, S. C.	1	.4
Adams, Col.	3	.3
Bowie, Tex.	2	.3
Ramsey, Minn.	3	.2
Florence, S. C.	1	.2
Portsmouth, Va.	1	.2
Wicomico, Md.	1	.2
Jasper, Mo.	1	.2
Richmond, Ga.	1	.2
New Hanover, N. C.	1	.2
Hennepin, Minn.	4	.2
Cook, Ill.	2	.2
Wayne, Ohio	1	.2
Fulton, Ga.	4	.2
Charleston, S. C.	1	.2
Anoka, Minn.	1	.2
Hillsborough, N. H.	1	.2
Alachua, Fla.	2	.1
Montgomery, Ala.	1	.1
Total Above Counties	38	4.6
Industry Total	288	10.0
% of U. S.	11.5	46.0
***2492—Lasts and Related Products**		
Plymouth, Mass.	8	.2
Essex, Mass.	7	.2
Norfolk, Mass.	2	.1
St. Louis City, Mo.	9	.1
New York, N. Y.	2	.1
Total Above Counties	28	.7
Industry Total	51	1.1
% of U. S.	54.9	63.6
***2493—Mirror and Picture Frames**		
Cook, Ill.	36	1.8
New York, N. Y.	88	.7
Los Angeles, Cal.	33	.3
Kings, N. Y.	24	.3
Fulton, Ga.	8	.3
Montgomery, Miss.	1	.2
La Porte, Ind.	2	.2
Morris, N. J.	2	.2
Middlesex, Mass.	5	.1
St. Louis City, Mo.	6	.1
Total Above Counties	205	4.2
Industry Total	343	5.2
% of U. S.	59.8	80.8

* Old SIC Code.

©SM, 1959.

Manufacture of Lumber & Wood Products—SIC 24—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 24 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2499—Wood Products, N.E.C.		
Los Angeles, Cal.	117	1.5
Oxford, Me.	25	1.3
Cook, Ill.	73	.8
Franklin, Me.	19	.8
New York, N. Y.	67	.7
Shelby, Tenn.	16	.6
Wayne, Mich.	15	.5
Piscataquis, Me.	5	.5
Hampden, Mass.	6	.5
Penobscot, Me.	10	.5
Cumberland, Me.	11	.5
Somerset, Me.	12	.5
Kent, Mich.	23	.5
San Joaquin, Cal.	5	.5
Kennebec, Me.	3	.4
Kings, N. Y.	44	.4
McKean, Pa.	3	.4
Van Buren, Mich.	3	.4
Seward, Neb.	1	.4
Buncombe, N. C.	2	.4
Total Above Counties	480	12.1
Industry Total	2,103	37.6
% of U. S.	21.9	32.2

Manufacture of Furniture & Fixtures—SIC 25

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 25

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2511—Wood Furniture, Not Upholstered		
Los Angeles, Cal.	297	5.9
Caldwell, N. C.	13	4.9
Cook, Ill.	104	4.8
Davidson, N. C.	19	3.9
Worcester, Mass.	45	2.9
Henry, Va.	6	2.6
Kent, Mich.	30	2.6
Burke, N. C.	6	2.5
Kings, N. Y.	122	2.4
Martinsville, Va.	6	2.3
York, Pa.	26	2.2
Chautauqua, N. Y.	22	2.1
Sebastian, Ark.	11	2.0
Hinds, Miss.	2	1.8
Campbell, Va.	1	1.8
Jefferson, Ky.	14	1.7
Sheboygan, Wis.	7	1.6
New York, N. Y.	127	1.5
Winnebago, Ill.	15	1.4
Shelby, Tenn.	13	1.3
Total Above Counties	886	52.2
Industry Total	2,785	132.0
% of U. S.	31.8	39.5
*2512—Household Furniture, Upholstered		
Los Angeles, Cal.	200	4.4
Guilford, N. C.	74	2.8
Cook, Ill.	71	2.4
New York, N. Y.	151	2.1
Catawba, N. C.	38	1.8
Worcester, Mass.	26	1.3
Hamblen, Tenn.	3	1.1
Kankakee, Ill.	2	1.1
Kings, N. Y.	80	1.0
Kent, Mich.	34	1.0
Columbia, Ohio	5	.8
Sebastian, Ark.	5	.8
Lycoming, Pa.	7	.7
Du Page, Ill.	3	.7
Cuyahoga, Ohio	28	.7
Caldwell, N. C.	4	.7
Adams, Ind.	3	.7
Philadelphia, Pa.	55	.7
Hennepin, Minn.	17	.6
Rush, Ind.	1	.6
Total Above Counties	807	26.0
Industry Total	1,781	58.9
% of U. S.	45.3	44.1
*2514—Metal House Furniture		
Cook, Ill.	60	3.2
Los Angeles, Cal.	57	2.0
Fayette, Ind.	2	1.6
Kane, Ill.	5	1.6
Kings, N. Y.	78	1.6
Philadelphia, Pa.	24	1.3
St. Louis City, Mo.	6	1.1
Bartholomew, Ind.	3	1.0
Wayne, Mich.	12	1.0
Delaware, Ind.	3	.9
Columbia, Ohio	1	.7
Coles, Ill.	1	.7
Cattaraugus, N. Y.	1	.7
Allegheny, Pa.	6	.6
Dade, Fla.	13	.6
Shelby, Tenn.	5	.6
Queens, N. Y.	16	.5
Lackawanna, Pa.	2	.5
Fulton, Ga.	3	.5
Miami, Ohio	1	.4
Total Above Counties	299	21.1
Industry Total	628	31.9
% of U. S.	47.6	66.1
*2515—Mattresses and Bedsprings		
Cook, Ill.	50	3.2
Kenosha, Wis.	2	3.1
Los Angeles, Cal.	75	1.5
Union, N. J.	3	1.5
Fulton, Ga.	5	1.4
San Francisco, Cal.	15	1.4
Cuyahoga, Ohio	8	1.0
Kings, N. Y.	60	1.0
Middlesex, Mass.	16	.7
New York, N. Y.	35	.7
Suffolk, Mass.	18	.6
Shelby, Tenn.	4	.6
Hamilton, Ohio	8	.5
Dallas, Tex.	7	.5
Worcester, Mass.	9	.5
Hamilton, Ohio	8	.5
Wayne, Mich.	15	.4
Ramsey, Minn.	5	.4
Wyandotte, Kan.	2	.4
Essex, N. J.	20	.4
Total Above Counties	366	29.3
Industry Total	1,195	33.5
% of U. S.	30.6	60.6
*2519—Household Furniture, N.E.C.		
Cook, Ill.	5	.3
Los Angeles, Cal.	14	.2
Queens, N. Y.	6	.2
Des Moines, Iowa	1	.1
Kings, N. Y.	4	.1
Total Above Counties	30	.9
Industry Total	69	1.1
% of U. S.	43.5	81.8
*2521—Wood Office Furniture		
Dubois, Ind.	8	1.1
Guilford, N. C.	4	.7
Kent, Mich.	4	.5
Herkimer, N. Y.	2	.4
Steuben, N. Y.	1	.4
Chatham, N. C.	1	.4
New York, N. Y.	15	.3
Cuyahoga, Ohio	2	.2
Davie, N. C.	1	.2
Lycoming, Pa.	3	.2
Cumberland, Pa.	1	.2
Des Moines, Iowa	1	.2
Milwaukee, Wis.	2	.2
Vanderburgh, Ind.	1	.2
Cook, Ill.	5	.1
Los Angeles, Cal.	9	.1
Erie, N. Y.	1	.1
Tarrant, Tex.	3	.1
Total Above Counties	64	5.6
Industry Total	112	6.5
% of U. S.	57.1	86.2
*2522—Metal Office Furniture		
Mahoning, Ohio	2	3.5
Chautauqua, N. Y.	4	1.5
Kane, Ill.	3	1.0
Kent, Mich.	5	.8
Muskegon, Mich.	1	.8
York, Pa.	1	.7
Erie, N. Y.	1	.7
Middlesex, N. J.	1	.7
Hamilton, Ohio	1	.6
Bronx, N. Y.	1	.4
Monroe, N. Y.	1	.4
Albemarle, Va.	1	.4
Philadelphia, Pa.	5	.4
St. Joseph, Mich.	2	.3
Erie, Pa.	2	.3
Essex, N. J.	3	.2
Los Angeles, Cal.	12	.2
Kings, N. Y.	6	.2
Jackson, Md.	1	.2
Linn, Iowa	1	.2
Total Above Counties	54	13.5
Industry Total	127	17.4
% of U. S.	42.5	77.6
*2531—Public Building and Related Furniture		
Kent, Mich.	4	2.2
Cook, Ill.	16	.7
Bell, Tex.	4	.9
Menominee, Mich.	1	.7
Smyth, Va.	1	.7
Los Angeles, Cal.	19	.6
Herkimer, N. Y.	1	.4
Wabash, Ind.	1	.4
Tyrrell, N. C.	1	.4
Catawba, N. C.	3	.4
Randolph, N. C.	3	.3
Philadelphia, Pa.	5	.3
Brown, Wis.	3	.2
Essex, N. J.	3	.2
Allegheny, Pa.	1	.2
Pierce, Wash.	1	.2
Dade, Fla.	2	.1
Worcester, Mass.	3	.1
Alameda, Cal.	4	.1
Chatham, N. C.	1	.1
Total Above Counties	77	9.2
Industry Total	289	14.9
% of U. S.	26.6	61.7
*2532—Professional Furniture		
Manitowoc, Wis.	1	1.1
Nassau, N. Y.	2	.7
Muskegon, Mich.	3	.5
Lenawee, Mich.	2	.4
St. Louis, Mo.	2	.4
Marshall, Ind.	2	.2
Cook, Ill.	8	.2
Cambria, Pa.	2	.2
St. Louis City, Mo.	3	.2
Macon, Ill.	1	.2
Chautauqua, N. Y.	1	.2
Kings, N. Y.	7	.1
Marion, Ind.	3	.1
Erie, N. Y.	1	.1
Hamilton, Ohio	2	.1
Total Above Counties	40	4.7
Industry Total	102	5.5
% of U. S.	39.2	85.5
*2541—Partitions and Fixtures		
Cuyahoga, Ohio	31	2.4
Cook, Ill.	97	2.1
Stark, Ohio	5	1.7
Kings, N. Y.	95	1.5
New York, N. Y.	137	1.5
Queens, N. Y.	31	1.3
Los Angeles, Cal.	98	1.3
Philadelphia, Pa.	34	.9
Kane, Ill.	6	.8
Orange, Va.	1	.7
Kent, Mich.	7	.6
Franklin, Ohio	11	.5

* Old SIC Code.

©SM, 1959.

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 25 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
San Francisco, Cal.	30	.5
Hillsborough, N. H.	3	.4
Branch, Mich.	1	.4
Suffolk, Mass.	27	.4
Baltimore City, Md.	17	.4
Hamilton, Ohio	16	.3
Chautauqua, N. Y.	4	.3
Essex, Mass.	3	.3
Total Above Counties	654	18.3
Industry Total	1,655	33.7
% of U. S.	39.5	54.3
*2561—Window and Door Screens		
Cook, Ill.	18	.4
Oklahoma, Okla.	5	.4
Los Angeles, Cal.	21	.3
Dade, Fla.	8	.3
Philadelphia, Pa.	1	.2
Stark, Ohio	1	.2
Shiawassee, Mich.	1	.2
Shelby, Tenn.	4	.2
St. Louis, Mo.	2	.1
Alameda, Cal.	4	.1
Erie, Pa.	1	.1
McKean, Pa.	1	.1
Total Above Counties	67	2.6
Industry Total	215	4.4
% of U. S.	31.2	59.1
*2562—Window Screens		
Hamilton, Ohio	1	.5
St. Joseph, Mich.	1	.5
Cook, Ill.	25	.4
New York, N. Y.	15	.3
St. Lawrence, N. Y.	2	.3
Providence, R. I.	2	.2
Oswego, N. Y.	1	.2
Kings, N. Y.	12	.1
Muskegon, Mich.	1	.1
Los Angeles, Cal.	14	.1
Bergen, N. J.	2	.1
Hudson, N. J.	2	.1
Total Above Counties	78	2.9
Industry Total	196	3.1
% of U. S.	39.8	93.5
*2563—Venetian Blinds		
Los Angeles, Cal.	66	.5
Lycoming, Pa.	1	.3
Bristol, Mass.	6	.3
Cook, Ill.	40	.3
New York, N. Y.	31	.2
Kings, N. Y.	39	.2
Harris, Tex.	13	.2
Allegheny, Pa.	5	.2
St. Louis City, Mo.	6	.2
Philadelphia, Pa.	14	.1
Bronx, N. Y.	16	.1
Queens, N. Y.	17	.1
Dallas, Tex.	13	.1
Hamilton, Ohio	7	.1
Jefferson, Ala.	6	.1
Fulton, Ga.	5	.1
Westchester, N. Y.	8	.1
Total Above Counties	293	3.2
Industry Total	911	7.0
% of U. S.	32.2	45.7
*2591—Restaurant Furniture		
St. Louis City, Mo.	8	.7
York, Pa.	1	.4
Sheboygan, Wis.	1	.4
Los Angeles, Cal.	20	.3
Winnebago, Wis.	1	.1
Worcester, Mass.	1	.2
Total Above Counties	32	2.0
Industry Total	163	2.8
% of U. S.	19.6	71.4
*2599—Furniture and Fixtures, N.E.C.		
Cook, Ill.	3	.2
Total Above Counties	3	.2
Industry Total	52	1.0
% of U. S.	5.8	20.0

Manufacture of Paper & Allied Products—SIC 26

Selling to SIC 26 . . .

By W. J. HEUBACH,
Assistant to the Director of Purchases
Union Bag-Camp Paper Corp.

The paper industry in recent years has been undergoing a tremendous change due to increased demand for its products and to various expansion programs undertaken by many of the large corporations.

This growth has made companies conscious of the need for men who are not mere order-writers, but capable and efficient purchasing managers, assistants, buyers and clerical purchasing people, who can come up with new ideas and reduced costs, and be a part of the management team. More now than ever, there's a need for a competent supplier representative who can work with Purchasing to secure lower packaging costs, reduced freight rates, improved products and other cost savings.

Purchasing management feels that establishing good supplier-relations that result in mutual profit is a vital part of the purchasing function. Some of the tools available to both sales and purchasing people to attain this goal are:

1. Training courses by local associations, local universities and colleges.
2. Company training programs for salesmen and purchasing people
3. Visits to customer or supplier plants
4. Emphasis on research and development programs
5. Careful planning for the future needs of an expanding industry
6. Purchasing research

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 26

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2611—Pulp Mills		
Penobscot, Me.	5	2.0
Adams, Miss.	2	1.6
Cowlitz, Wash.	4	1.5
Chatham, Ga.	3	1.5
Wood, Wis.	4	1.4
Georgetown, S. C.	2	1.4
Mobile, Ala.	4	1.3
Coos, N. H.	2	1.3
Snohomish, Wash.	3	1.2
Southhampton, Va.	1	1.2
Chatham, Wash.	3	1.1
Nassau, Fla.	2	1.1
Hopewell City, Va.	2	1.1
Haywood, N. C.	1	1.1
Morehouse, La.	2	1.1
Talladega, Ala.	1	1.0
Outagamie, Wis.	4	.9
Carlton, Minn.	2	.9
Ouachita, La.	1	.9
Macon, Wash.	3	.9
Total Above Counties	51	24.5
Industry Total	252	59.2
% of U. S.	20.2	41.4
*2612—Paper and Paperboard Mill		
Butler, Ohio	8	7.1
Wood, Wis.	4	3.9
Hampden, Mass.	17	3.8
Kalamazoo, Mich.	10	2.9
Cumberland, Me.	1	2.7
Outagamie, Wis.	5	2.4
Ross, Ohio	2	2.2
Berkshire, Mass.	10	2.1
Niagara, N. Y.	8	2.1
Winnebago, Wis.	8	2.1
Penobscot, Me.	4	2.1
Saratoga, N. Y.	7	2.1
Covington City, Va.	1	2.0
Haywood, N. C.	1	1.8
Chatham, Ga.	2	1.8
Oxford, Me.	1	1.8
Jefferson, N. Y.	9	1.8
Mobile, Ala.	3	1.6
Kennebec, Me.	4	1.6
Jefferson, Ark.	1	1.5
Total Above Counties	104	49.4
Industry Total	589	146.7
% of U. S.	17.7	33.7
*2613—Building Paper and Board Mills		
Jones, Miss.	1	2.5
Jefferson, La.	1	2.0
Carlton, Minn.	1	.7
Koochiching, Minn.	1	.7
Bibb, Ga.	1	.7
Mercer, N. J.	2	.4
Lauderdale, Miss.	1	.4
Mobile, Ala.	2	.4
Greenville, Va.	1	.4
Adams, Miss.	1	.4
Oswego, N. Y.	2	.4
Columbia, Ore.	1	.4
Washington, Miss.	1	.4
Mendocino, Cal.	1	.4
Montgomery, Pa.	1	.2
Hill, Ill.	2	.2
Erie, Pa.	1	.2
Dubuque, Iowa	1	.2
Carroll, Md.	1	.2
Alameda, Cal.	1	.2
Total Above Counties	24	11.4
Industry Total	91	16.3
% of U. S.	26.4	69.9
*2641—Paper Coating and Glazing		
Ramsey, Minn.	1	5.6
Kalamazoo, Mich.	7	2.5
Cook, Ill.	20	2.2
Hillsborough, N. H.	1	1.3
Worcester, Mass.	7	.8
Butler, Ohio	3	.8

* Old SIC Code.

©SM, 1959.

Manufacture of Paper & Allied Products—SIC 26—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 26 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Winnebago, Wis.	2	.8
Middlesex, N. J.	3	.7
Essex, Mass.	2	.7
Bucks, Pa.	1	.7
Knox, Ohio	1	.7
Alameda, Cal.	5	.5
Hampden, Mass.	7	.5
Los Angeles, Cal.	8	.4
Hennepin, Minn.	1	.4
Bronx, N. Y.	2	.4
Hunterdon, N. J.	1	.4
Ulster, N. Y.	1	.4
Berrien, Mich.	1	.4
Outagamie, Wis.	1	.4
Total Above Counties	75	20.6
Industry Total	277	28.7
% of U. S.	27.1	71.8

*2651—Envelopes

Cook, Ill.	18	1.4
New York, N. Y.	25	1.2
Worcester, Mass.	7	1.1
Montgomery, Ohio	3	1.1
St. Louis City, Mo.	5	.9
Kings, N. Y.	6	.8
Philadelphia, Pa.	9	.6
Hampden, Mass.	3	.5
Wayne, Mich.	5	.5
Jackson, Mo.	6	.5
Los Angeles, Cal.	11	.5
Hartford, Conn.	2	.4
Marion, Ind.	3	.4
Cuyahoga, Ohio	4	.4
Lake, Ill.	1	.4
Dallas, Tex.	4	.4
San Francisco, Cal.	5	.3
Baltimore City, Md.	4	.3
Ramsey, Minn.	5	.3
Milwaukee, Wis.	2	.2
Total Above Counties	128	12.2
Industry Total	194	16.4
% of U. S.	66.0	74.4

*2661—Paper Bags

Chatham, Ga.	2	5.2
Escambia, Fla.	1	3.0
Tuscaloosa, Ala.	1	1.7
Cook, Ill.	30	1.6
Mobile, Ala.	5	1.5
St. Louis City, Mo.	6	1.3
Los Angeles, Cal.	24	1.3
Cuyahoga, Ohio	5	.8
Hampden, Mass.	2	.7
Richmond City, Va.	4	.7
Putnam, Fla.	1	.7
Ouachita, Ark.	2	.7
Middlesex, Mass.	6	.7
Jackson, La.	1	.7
Ouachita, La.	3	.7
New York, N. Y.	20	.6
Kings, N. Y.	30	.5
Brooke, W. Va.	4	.5
Alameda, Cal.	5	.5
Nassau, Fla.	2	.5
Total Above Counties	154	23.9
Industry Total	381	34.2
% of U. S.	40.4	69.9

*2671—Paperboard Boxes

Cook, Ill.	126	12.2
Philadelphia, Pa.	71	6.6
Kings, N. Y.	107	5.9
Los Angeles, Cal.	72	5.4
New York, N. Y.	106	4.3
Hudson, N. J.	34	4.2
Baltimore City, Md.	21	4.2
Queens, N. Y.	27	3.5
Middlesex, Mass.	27	3.4
St. Louis City, Mo.	31	3.1
Hamilton, Ohio	17	2.9
Milwaukee, Wis.	15	2.6
Cuyahoga, Ohio	20	2.4
Bergen, N. J.	15	2.1
Erie, N. Y.	19	2.1
New Haven, Conn.	17	2.1
Allegheny, Pa.	12	2.1
Essex, N. J.	27	2.1
Monroe, Mich.	4	2.0
Calhoun, Mich.	4	2.0
Total Above Counties	772	75.2
Industry Total	1,697	164.5
% of U. S.	45.5	45.7

*2674—Fiber Cans, Tubes and Drums

Darlington, S. C.	1	1.3
St. Louis, Mo.	3	.9
Van Wert, Ohio	1	.7
Hudson, N. J.	4	.6
Berks, Pa.	1	.5
Cook, Ill.	9	.5
Will, Ill.	1	.4
Providence, R. I.	3	.4
Warren, N. J.	2	.4
Cuyahoga, Ohio	4	.4
Philadelphia, Pa.	11	.3
Middlesex, Mass.	6	.3
Shelby, Tenn.	3	.3
Union, N. J.	6	.2
Wayne, Mich.	4	.2
Queens, N. Y.	4	.2
Erie, N. Y.	2	.2
New Castle, Del.	1	.2
Washington, D. C.	1	.1
Ramsey, Minn.	1	.1
Total Above Counties	68	8.2
Industry Total	185	12.3
% of U. S.	36.8	66.7

*2691—Die-Cut Paper and Board

Wayne, Mich.	8	1.7
New York, N. Y.	67	1.0
Kings, N. Y.	23	.7
Broome, N. Y.	2	.7
Cook, Ill.	34	.7
Queens, N. Y.	2	.4
Washington, D. C.	2	.4
Nassau, N. Y.	1	.4
Madison, N. Y.	1	.4
Niagara, N. Y.	1	.4
Hamilton, Ohio	6	.3
Essex, N. J.	9	.3
Los Angeles, Cal.	18	.3
Oakland, Mich.	2	.2
Bergen, N. J.	3	.2
Suffolk, Mass.	11	.2
Milwaukee, Wis.	5	.2
Onondaga, N. Y.	1	.2
Monroe, Mich.	2	.2
Dakota, Minn.	1	.2
Total Above Counties	198	9.1
Industry Total	352	12.3
% of U. S.	56.3	74.0

*2693—Wallpaper

Warren, N. Y.	1	1.2
Kendall, Ill.	1	.7
Will, Ill.	7	.4
York, Pa.	4	.4
Erie, N. Y.	2	.2
Worcester, Mass.	1	.2
Bucks, Pa.	3	.2
Cook, Ill.	5	.2
Clinton, N. Y.	1	.2
Grundy, Ill.	1	.1
Cuyahoga, Ohio	3	.1
New York, N. Y.	8	.1
Total Above Counties	37	4.0
Industry Total	76	4.1
% of U. S.	48.7	97.6

*2694—Pulp Goods, Pressed and Molded

Kennebec, Me.	1	.7
Coos, N. H.	1	.4
Hampden, Mass.	1	.4
Rockland, N. Y.	1	.4
Lake, Ind.	2	.2
Kane, Ill.	1	.2
Washington, Wis.	1	.2
St. Lawrence, N. Y.	1	.2
Total Above Counties	9	2.7
Industry Total	29	3.1
% of U. S.	31.0	87.1

*2699—Paper and Board Products, N.E.C.

Cook, Ill.	58	4.4
Middlesex, Mass.	22	3.3
Kalamazoo, Mich.	4	3.3
Los Angeles, Cal.	56	2.9
Kings, N. Y.	40	2.4
Oswego, N. Y.	3	2.2
Winnebago, Wis.	7	2.1
Queens, N. Y.	12	2.0
New York, N. Y.	62	1.9
Brown, Wis.	6	1.9
Greene, Mo.	3	1.7
Philadelphia, Pa.	29	1.7
Northampton, Pa.	1	1.5
Baltimore City, Md.	10	1.3
Hamilton, Ohio	6	1.3
Berrien, Mich.	3	1.2
Delaware, Pa.	3	1.1
Shelby, Tenn.	3	1.0
Hudson, N. J.	4	1.0
Essex, N. J.	16	1.0
Total Above Counties	34.9	39.2
Industry Total	874	73.3
% of U. S.	39.9	53.5

* Old SIC Code.

©SM, 1959.

Printing and Publishing—SIC 27

Selling to SIC 27 . . .

By T. A. CORCORAN,
Director of Purchasing,
Courier-Journal & Louisville Times Co.

Good salesmen frequently say they much prefer to deal with companies with strongly centralized purchasing departments—that it simplifies their job of selling. They feel their proposals are more likely to be selected on a merit than a personality basis. With centralization they can be more certain that their proposals have been presented to the proper person or persons.

If this represents the general feeling of salesmen, they must find publishing companies, particularly newspapers, difficult to deal with, because many do not have centralized purchasing departments. It is true, however, that there is a trend in this direction, not as pronounced as in industrial manufacturing companies, but undoubtedly on the increase due to the rapidly increasing costs in the publishing field. The weaker publications not taken over, or driven out of business by increased costs, will be the better managed and more progressive. They will be likely to adopt modern purchasing methods.

Salesmen naturally have to adapt their methods to con-

policy to cooperate fully with any company that has established centralized purchasing. Any attempt by salesmen to disregard the ground rule laid down for procurement is a direct affront to the management of the company.

Rising costs make efficient operation imperative in the printing field. To meet this challenge, purchasing departments must have the active and intelligent assistance of the salesmen who call. This means salesmen must become better informed on the industry's problems and processes. They must be able to apply a vivid imagination to these products and services they sell can help solve them.

SM Estimates for 4-Digit Employment (Old Code), Leading Counties SIC 27

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2711—Newspapers		
New York, N. Y.	101	18.0
Cook, Ill.	114	11.4
Los Angeles, Cal.	156	11.0
Suffolk, Mass.	38	7.3
Philadelphia, Pa.	17	6.4
Washington, D. C.	20	4.7
Allegheny, Pa.	44	4.5
San Francisco, Cal.	38	4.1
Baltimore City, Md.	13	3.1
Cuyahoga, Ohio	43	3.0
Hamilton, Ohio	22	2.6
Dade, Fla.	23	2.3
Essex, N. J.	22	2.3
Milwaukee, Wis.	23	2.3
Jefferson, Ala.	9	2.3
Denver, Col.	19	2.2
St. Louis City, Mo.	17	2.2
Harris, Tex.	21	2.2
Dallas, Tex.	17	2.1
King, Wash.	41	2.0
Total Above Counties	798	96.0
Industry Total	8,630	305.4
% of U. S.	9.2	31.4
*2721—Periodicals		
New York, N. Y.	494	22.1
Cook, Ill.	217	5.4
Philadelphia, Pa.	8	5.0
Polk, Iowa	11	2.9
Clark, Ohio	1	2.2
Washington, D. C.	50	2.2
Westchester, N. Y.	20	1.6
Los Angeles, Cal.	104	1.2
Cuyahoga, Ohio	32	1.1
Fairfield, Conn.	17	.9
Hamilton, Ohio	12	.8
St. Louis City, Mo.	22	.7
Milwaukee, Wis.	16	.6
Jackson, Mo.	20	.6
Davidson, Tenn.	9	.6
Franklin, Ohio	17	.5
Kane, Ill.	2	.4
Bronx, N. Y.	4	.4
Suffolk, Mass.	35	.4
Wayne, Mich.	32	.4
Total Above Counties	1,123	50.0
Industry Total	2,013	61.6
% of U. S.	55.8	82.0
*2731—Books, Publishing and Printing		
New York, N. Y.	277	12.5
Cook, Ill.	71	5.8
Nassau, N. Y.	5	2.1
Racine, Wis.	1	1.5
Suffolk, Mass.	24	1.4
Ramsey, Minn.	8	1.4
Cuyahoga, Ohio	8	1.0
Philadelphia, Pa.	9	.8
Monroe, N. Y.	2	.8
St. Louis City, Mo.	6	.6
Dallas, Tex.	7	.6
Milwaukee, Wis.	6	.5
Hamilton, Ohio	6	.4
Madison, Ind.	1	.4
Des Moines, Iowa	1	.4
Kings, N. Y.	8	.3
Westchester, N. Y.	15	.3
Lake, Ill.	7	.3
Los Angeles, Cal.	24	.3
Jackson, Mo.	10	.2
Total Above Counties	496	31.6
Industry Total	799	39.9
% of U. S.	62.1	79.2
*2732—Book Printing		
New York, N. Y.	123	3.9
Philadelphia, Pa.	11	2.2
Montgomery, Ind.	2	1.9
Sullivan, Tenn.	1	1.8
Cook, Ill.	33	1.5
Middlesex, Mass.	4	1.0
Davidson, Tenn.	1	1.0
Nassau, N. Y.	5	.9
Norfolk, Mass.	2	.8
York, Pa.	3	.8
Lake, Ind.	2	.8
Union, N. J.	1	.8
Lackawanna, Pa.	1	.8
Worcester, Mass.	2	.8
Winnebago, Wis.	1	.8
Dallas, Tex.	1	.8
Hamilton, Ohio	10	.7
Kings, N. Y.	13	.4
Suffolk, Mass.	17	.4
Marion, Ind.	5	.3
Total Above Counties	238	22.4
Industry Total	589	25.6
% of U. S.	40.4	87.5
*2741—Miscellaneous Publishing		
New York, N. Y.	246	5.0
Cook, Ill.	58	2.8
Davidson, Tenn.	2	1.2
Wayne, Mich.	17	.9
Middlesex, Mass.	5	.7
Los Angeles, Cal.	62	.6
Washington, D. C.	9	.4
Marion, Ind.	9	.4
Suffolk, Mass.	15	.4
Westchester, N. Y.	10	.4
Franklin, Ohio	2	.4
Des Moines, Iowa	1	.4
Richmond City, Va.	2	.4
Cuyahoga, Ohio	12	.3
Hennepin, Minn.	7	.2
Allegheny, Pa.	5	.2
Hampden, Mass.	4	.2
Queens, N. Y.	5	.1
Hamilton, Ohio	6	.1
Westmoreland, Pa.	1	.1
Total Above Counties	478	15.2
Industry Total	946	17.6
% of U. S.	50.5	85.4
*2751—Commercial Printing		
Cook, Ill.	718	26.5
New York, N. Y.	1,292	19.0
Los Angeles, Cal.	540	7.5
Ramsey, Minn.	47	6.4
Montgomery, Ohio	35	5.5
Milwaukee, Wis.	109	3.8
Hudson, N. J.	52	3.7
Cuyahoga, Ohio	181	3.5
Wayne, Mich.	235	3.3
Hamilton, Ohio	121	3.2
St. Louis City, Mo.	157	3.2
Baltimore City, Md.	120	3.1
Philadelphia, Pa.	304	2.9
San Francisco, Cal.	164	2.9
Suffolk, Mass.	207	2.9
Jefferson, Ky.	46	2.6
Kings, N. Y.	196	2.5
Erie, N. Y.	76	2.2
New Haven, Conn.	67	1.8
Fulton, Ga.	73	1.8
Total Above Counties	4,740	108.3
Industry Total	12,072	217.6
% of U. S.	39.3	49.8
*2761—Lithographing		
Cook, Ill.	261	10.1
New York, N. Y.	346	7.9
St. Louis City, Mo.	98	3.7
Philadelphia, Pa.	88	2.7
Los Angeles, Cal.	187	2.6
San Francisco, Cal.	54	2.3
Suffolk, Mass.	44	2.1
Hamilton, Ohio	40	1.9
Niagara, N. Y.	2	1.8
Milwaukee, Wis.	48	1.8
Cuyahoga, Ohio	72	1.7
Queens, N. Y.	18	1.6
Wayne, Mich.	56	1.5
Washington, D. C.	30	1.5
Alameda, Cal.	18	1.3
Allegheny, Pa.	31	1.2
Nassau, N. Y.	16	1.2
Monroe, N. Y.	18	1.2
Hennepin, Minn.	36	1.1
Baltimore City, Md.	36	1.0
Total Above Counties	1,497	50.2
Industry Total	2,961	85.3
% of U. S.	50.6	58.9
*2771—Greeting Cards		
New York, N. Y.	66	3.2
Jackson, Mo.	4	2.5
Cuyahoga, Ohio	5	1.9
Hamilton, Ohio	5	1.7
Cook, Ill.	23	1.6
Suffolk, Mass.	9	1.6
Will, Ill.	3	1.1
Kings, N. Y.	16	.8
Los Angeles, Cal.	14	.7
Westchester, N. Y.	2	.4
Middlesex, Mass.	5	.4
Hillsborough, N. H.	1	.4
Shawnee, Kan.	1	.4
Worcester, Mass.	1	.4
Chemung, N. Y.	1	.4
Philadelphia, Pa.	8	.3
Bronx, N. Y.	5	.3
Queens, N. Y.	9	.3
Hampden, Mass.	3	.2
Providence, R. I.	3	.2
Total Above Counties	189	18.8
Industry Total	294	22.2
% of U. S.	64.6	84.7
*2781—Bookbinding		
New York, N. Y.	205	6.6
Cook, Ill.	54	2.1
Philadelphia, Pa.	33	1.1
Middlesex, Mass.	10	.9
Wayne, Mich.	14	.7
Los Angeles, Cal.	30	.4
Broome, N. Y.	1	.4
Queens, N. Y.	4	.4
St. Louis City, Mo.	15	.4
Baltimore City, Md.	8	.4
Morgan, Ill.	2	.3
Suffolk, Mass.	18	.3
Cuyahoga, Ohio	17	.2
Monroe, N. Y.	5	.2
Fairfield, Conn.	1	.2
Milwaukee, Wis.	6	.2
Camden, N. J.	2	.2
Hamilton, Ohio	11	.2
Wabash, Ind.	1	.2
Bexar, Tex.	2	.2
Total Above Counties	439	15.6
Industry Total	726	18.3
% of U. S.	60.3	88.2
*2782—Blankbooks and Paper Ruling		
New York, N. Y.	65	.8
Los Angeles, Cal.	13	.6
Richland, Ohio	1	.6
Cook, Ill.	25	.5
Milwaukee, Wis.	2	.4
Ellis, Tex.	1	.4
Baltimore City, Md.	5	.4
Union, N. J.	5	.3
Chemung, N. Y.	1	.3
St. Joseph, Mich.	1	.3
Philadelphia, Pa.	15	.3
Hampshire, Mass.	1	.2
Shawnee, Kan.	2	.2
Kings, N. Y.	11	.2
Middlesex, Mass.	2	.2
Fairfield, Conn.	1	.2
Hampden, Mass.	2	.2
Cuyahoga, Ohio	3	.1
Jefferson, Ky.	4	.1
Suffolk, Mass.	17	.1
Total Above Counties	177	6.4
Industry Total	336	7.1
% of U. S.	52.7	80.1
*2783—Loose-Leaf Binders and Devices		
Cook, Ill.	19	1.1
Los Angeles, Cal.	8	.8
New York, N. Y.	30	.8
Kalamazoo, Mich.	1	.8
Hampden, Mass.	2	.7
Kings, N. Y.	3	.7
Onondaga, N. Y.	4	.4
Bristol, Mass.	2	.4
Union, N. J.	1	.4
Milwaukee, Wis.	3	.3
Dutchess, N. Y.	2	.2
St. Louis City, Mo.	8	.2
Marion, Ind.	3	.2
St. Lawrence, N. Y.	1	.2
Delaware, Pa.	2	.2
Queens, N. Y.	1	.2
Cheshire, N. H.	1	.2
Wayne, Mich.	2	.2
Total Above Counties	93	6.0
Industry Total	154	8.1
% of U. S.	60.4	98.8

* Old SIC Code.

©SM, 1959.

Your Guide to Prospect Identification—pages 85-137

Printing and Publishing—SIC 27—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 27 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2789—Miscellaneous Bookbinding Work		
New York, N. Y.	69	1.3
Cook, Ill.	27	.7
Los Angeles, Cal.	14	.3
Suffolk, Mass.	9	.1
Total Above Counties	119	2.4
Industry Total	201	3.0
% of U. S.	59.2	80.0
*2791—Typesetting		
New York, N. Y.	225	4.1
Cook, Ill.	111	2.1
Philadelphia, Pa.	32	1.0
Wayne, Mich.	22	.8
Los Angeles, Cal.	72	.7
St. Louis City, Mo.	26	.4
Suffolk, Mass.	20	.3
Cuyahoga, Ohio	26	.3
Washington, D. C.	10	.3
Yakima, Wash.	6	.3
San Francisco, Cal.	21	.2
Lancaster, Pa.	2	.2
Hennepin, Minn.	10	.2
Hamilton, Ohio	11	.2
Montgomery, Ohio	8	.2
Milwaukee, Wis.	15	.2
Jackson, Mo.	16	.2
Baltimore City, Md.	14	.2
Dallas, Tex.	10	.2
Allegheny, Pa.	15	.1
Total Above Counties	670	12.2
Industry Total	1,080	15.4
% of U. S.	62.0	79.2
*2792—Engraving and Plate Printing		
Bronx, N. Y.	1	1.0
New York, N. Y.	97	.8
Philadelphia, Pa.	17	.8
Cook, Ill.	58	.7
Passaic, N. J.	15	.3
Mecklenburg, N. C.	7	.2
New Haven, Conn.	4	.2
Cuyahoga, Ohio	9	.2
Providence, R. I.	10	.2
Worcester, Mass.	1	.1
Jefferson, Ala.	3	.1
Los Angeles, Cal.	18	.1
Jefferson, Ky.	10	.1
Wayne, Mich.	12	.1
Jackson, Mo.	6	.1
Washington, D. C.	6	.1
Bergen, N. J.	5	.1
Total Above Counties	278	5.2
Industry Total	562	7.8
% of U. S.	49.5	66.7
*2793—Photoengraving		
New York, N. Y.	94	4.4
Cook, Ill.	54	2.8
Philadelphia, Pa.	22	1.0
Wayne, Mich.	21	.8
Los Angeles, Cal.	47	.6
Cuyahoga, Ohio	18	.5
Suffolk, Mass.	13	.3
Marion, Ind.	8	.3
St. Louis City, Mo.	14	.3
San Francisco, Cal.	16	.3
Dallas, Tex.	9	.2
Hamilton, Ohio	13	.2
Milwaukee, Wis.	12	.2
Fairfield, Conn.	10	.2
Queens, N. Y.	3	.2
Washington, D. C.	8	.1
Allegheny, Pa.	11	.1
Providence, R. I.	9	.1
Kings, N. Y.	4	.1
New Haven, Conn.	6	.1
Total Above Counties	389	12.8
Industry Total	891	18.8
% of U. S.	43.7	68.1
*2794—Electrotyping and Stereotyping		
New York, N. Y.	32	2.6
Cook, Ill.	22	1.3
Philadelphia, Pa.	7	.4
Wayne, Mich.	7	.3
Cuyahoga, Ohio	10	.3
Suffolk, Mass.	5	.3
San Francisco, Cal.	7	.2
Marion, Ind.	3	.2
Davidson, Tenn.	2	.2
Los Angeles, Cal.	8	.2
St. Louis City, Mo.	7	.1
Erie, N. Y.	5	.1
Winnebago, Wis.	2	.1
Total Above Counties	117	5.7
Industry Total	233	8.4
% of U. S.	50.2	67.

Manufacture of Chemicals & Allied Products—SIC 28

Selling to SIC 28 . . .

By H. K. La ROWE,
Director of Purchases, American Cyanamid Co.

Programs for selling to the chemical industry must take account of the dynamic nature of many segments of the industry as typified by a continuous flow of new products, rapid product-obsolescence, and advanced processing developments.

The regional sales representative is usually well informed in areas concerning his product, the competition, and the current requirements of customers. But this may not be enough.

Purchasing people need to know what new products are just around the corner, or what is now in earlier stages of laboratory development. The forward-planning elements in purchasing correlate with those for marketing. This flow of advance information, particularly for multi-plant and multi-regional customers, would improve if national account representatives called oftener.

Purchasing in the chemical industry has become increasingly value-conscious. Although quality considerations are important, the trend is to avoid over-buying quality for the job the product has to do.

Similarly, the service after the sale is often a controlling factor.

With respect to price, our interest is in the lowest competitive cost at point of use. The use of alternative materials, changes in specification and handling methods, and market and economic studies on industry and supplier capabilities, are all studied from the viewpoint of minimizing costs.

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 28

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2811—Sulphuric Acid		
Baltimore City, Md.	1	.7
Contra Costa, Cal.	2	.4
Los Angeles, Cal.	3	.4
Polk, Tenn.	1	.4
Peoria, Ill.	2	.3
Cook, Ill.	2	.2
Cuyahoga, Ohio	1	.2
Bergen, N. J.	1	.2
Erie, N. Y.	1	.2
Harris, Tex.	1	.2
Deer Lodge, Mont.	1	.2
E.Baton Rouge,La.	1	.2
Fayette, Pa.	1	.1
Pulaski, Va.	1	.1
Bucks, Pa.	1	.1
Vermilion, Ill.	2	.1
Salt Lake, Utah	1	.1
Total Above Counties	23	4.1
Industry Total	48	4.1
% of U. S.	47.9	100.0
*2812—Alkalies and Chlorine		
Wayne, Mich.	2	3.7
Lake, Ohio	1	2.5
Onondaga, N. Y.	1	2.1
Summit, Ohio	1	1.6
Smyth, Va.	1	1.5
Kanawha, W. Va.	1	1.3
Marshall, W. Va.	2	.8
Calcasieu, La.	1	.8
Contra Costa, Cal.	1	.8
Harris, Tex.	1	.8
East Baton Rouge, La.	1	.6
Nueces, Tex.	1	.5
Pierce, Wash.	2	.5
Niagara, N. Y.	2	.4
Clark, Nev.	1	.5
Coos, N. H.	1	.2
Muskegon, Mich.	1	.2
Sedgwick, Kan.	1	.2
Washington, Ala.	1	.1
Multnomah, Ore.	1	.1
Total Above Counties	24	18.8
Industry Total	29	20.6
% of U. S.	82.8	91.3
*2819—Inorganic Chemicals, N.E.C.		
Aiken, S. C.	1	13.9
Benton, Wash.	2	8.6
Roane, Tenn.	1	7.0
Bernalillo, N. M.	1	5.5
Anderson, Tenn.	1	5.5
Niagara, N. Y.	9	2.4
Hamilton, Ohio	8	2.4
Saline, Ark.	2	2.3
Hopewell, Va.	1	2.2
St. Clair, Ill.	2	2.0
Pike, Ohio	1	1.8
McCracken, Ky.	1	1.6

* Old SIC Code.

©SM, 1959.

coming...

in the September 1959 issue of
PLASTICS TECHNOLOGY the Magazine of Applied Engineering

1 What to look for when planning to buy extrusion auxiliary equipment.

2 A 1959 data round-up on extruders and blow-molding machines.

3 A classified listing of auxiliary equipment for plastics extrusion machines.

An opportunity to place your sales message where plastics engineers will look for buying information.

Plastics engineers responsible for design, development and production of engineered plastics products need an up-to-date round-up of available equipment. They'll get the only complete buying information on extruders, blow-molding and auxiliary equipment in the September issue of PLASTICS TECHNOLOGY.

Whether you sell equipment, materials or supplies this means more intensive readership and longer useful life for your advertising in a place where the men who specify and buy, look for buying information, and who will be using this issue as a constant reference guide.

Tell your complete product story in the September PLASTICS TECHNOLOGY—the Magazine of Applied Engineering

Reserve your space now — closing date September 1

Advertising Rates				Mechanical Requirements				
Size	1 time	6 times	12 times		Width	Depth	Width	Depth
1 page	$490.00	$450.00	$410.00	1 page	7	10		
⅔ page	355.00	325.00	295.00	⅔ page	4⅝	10		
½ page (island)	295.00	275.00	250.00	½ page (island)	4⅝	7⅝		
½ page	270.00	250.00	225.00	½ page	3⅜	10	7	4⅞
⅓ page	195.00	175.00	155.00	⅓ page	2⅜	10	4⅝	4⅞

PLASTICS TECHNOLOGY

A Bill Brothers publication • 630 Third Avenue New York 17, New York

YUkon 6-4800

Manufacture of Chemicals & Allied Products—SIC 28—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 28 (Cont'd

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Baltimore City, Md.	9	1.6
Los Angeles, Cal.	19	1.5
Wayne, Mich.	6	1.5
Maury, Tenn.	3	1.2
Lawrence, Ohio	2	1.1
Jefferson, Col.	1	1.1
Cook, Ill.	14	1.1
Harris, Tex.	9	1.1
Total Above Counties	89	65.6
Industry Total	442	97.4
% of U. S.	20.1	67.4
*2821—Cyclic Crudes		
Brooke, W. Va.	1	.4
Cook, Ill.	3	.3
Bergen, N. J.	1	.2
Essex, N. J.	1	.2
Cuyahoga, Ohio	2	.1
Mahoning, Ohio	2	.1
Total Above Counties	10	1.3
Industry Total	43	2.1
% of U. S.	23.3	61.9
*2822—Intermediates and Organic Colors		
Midland, Mich.	1	7.0
Somerset, N. J.	1	3.8
Gloucester, N. J.	1	2.3
St. Clair, Ill.	1	2.1
Erie, N. Y.	1	2.1
Hamilton, Ohio	4	1.5
Beaver, Pa.	1	1.2
Galveston, Tex.	1	1.2
Union, N. J.	2	1.1
Cook, Ill.	2	.8
Middlesex, Mass.	3	.8
Cabell, W. Va.	2	.7
Rensselaer, N. Y.	1	.7
Essex, N. J.	10	.7
Philadelphia, Pa.	1	.7
Pleasants, W. Va.	1	.7
Passaic, N. J.	8	.5
Los Angeles, Cal.	3	.4
Bristol, Mass.	1	.4
Ocean, N. J.	1	.4
Total Above Counties	48	29.1
Industry Total	107	33.7
% of U. S.	43.0	86.4
*2823—Plastics Materials and Elastomers		
Middlesex, N. J.	5	4.1
Hampden, Mass.	3	3.0
Erie, N. Y.	4	3.0
Spotsylvania, Va.	1	2.9
Bucks, Pa.	1	2.5
Chesterfield, Va.	1	2.4
Midland, Mich.	1	2.2
Clinton, Iowa	1	1.6
Davidson, Tenn.	1	1.6
Niagara, N. Y.	5	1.6
Galveston, Tex.	1	1.4
Allegheny, Pa.	4	1.3
Jefferson, Ky.	2	1.1
Pickaway, Ohio	1	1.0
Essex, N. J.	4	.9
Philadelphia, Pa.	7	.9
Union, N. J.	8	.8
Knox, Tenn.	1	.8
Transylvania, N. C.	1	.8
Hudson, N. J.	3	.8
Total Above Counties	55	34.7
Industry Total	211	47.0
% of U. S.	26.1	73.8
*2824—Synthetic Rubber		
Jefferson, Ky.	2	3.1
Harris, Tex.	3	1.3
East Baton Rouge, La.	3	1.1
Jefferson, Tex.	2	.6
Calcasieu, La.	1	.6
Summit, Ohio	2	.5
New Haven, Conn.	1	.4
Galveston, Tex.	1	.4
Los Angeles, Cal.	1	.4
Hutchinson, Tex.	1	.4
Mercer, N. J.	1	.2
Portage, Ohio	1	.2
Total Above Counties	19	9.2
Industry Total	21	9.2
% of U. S.	90.5	100.0
*2825—Synthetic Fibers		
Sullivan, Tenn.	1	7.8
Escambia, Fla.	1	4.0
Buncombe, N. C.	1	3.5
Roanoke City, Va.	1	3.4
Davidson, Tenn.	1	3.3
Carter, Tenn.	2	3.0
Henry, Va.	1	3.0
Hamilton, Tenn.	1	2.5
Sussex, Del.	1	2.5
Waynesboro City, Va.	2	2.4
Mifflin, Pa.	1	2.3
Allegheny, Md.	1	2.2
Giles, Va.	1	2.1
Warren, Va.	1	2.1
Lenoir, N. C.	1	2.0
York, S. C.	1	2.0
Chesterfield, Va.	1	1.8
Crawford, Pa.	1	1.5
Lake, Ohio	1	1.5
Wood, W. Va.	2	1.4
Total Above Counties	23	54.3
Industry Total	46	61.6
% of U. S.	50.0	88.1
*2826—Explosives		
Johnson, Kan.	1	4.2
Radford City, Va.	1	3.8
Clark, Ind.	1	3.4
Sauk, Wis.	1	2.6
Schuylkill, Pa.	1	2.4
Hamilton, Tenn.	1	1.9
Williamson, Ill.	2	1.0
Will, Ill.	1	.9
Passaic, N. J.	1	.7
Ulster, N. Y.	1	.7
Morris, N. J.	1	.7
Jasper, Mo.	3	.7
Vermillion, Ind.	1	.7
Madison, Ill.	1	.7
Sullivan, Tenn.	1	.6
Jefferson, Ala.	2	.5
Hartford, Conn.	1	.4
Grundy, Ill.	1	.4
Berkeley, W. Va.	2	.4
Cochise, Ariz.	1	.4
Total Above Counties	25	27.1
Industry Total	74	33.5
% of U. S.	33.8	80.9
*2829—Industrial Organic Chemicals, N.E.C.		
Kanawha, W. Va.	5	11.5
Salem, N. J.	2	7.1
Philadelphia, Pa.	9	4.4
East Baton Rouge, La.	2	4.2
Niagara, N. Y.	6	3.7
Brazoria, Tex.	2	3.7
Harris, Tex.	5	2.7
Sullivan, Tenn.	1	2.5
Galveston, Tex.	1	2.5
Orange, Tex.	2	2.2
Middlesex, N. J.	5	1.9
Union, N. J.	6	1.9
St. Louis City, Mo.	1	1.7
New Haven, Conn.	2	1.1
Putnam, W. Va.	2	1.1
Midland, Mich.	1	1.1
Jefferson, Ark.	1	1.1
Lake, Ind.	2	1.0
Nueces, Tex.	1	.7
Victoria, Tex.	1	.7
Total Above Counties	57	56.8
Industry Total	277	67.8
% of U. S.	20.6	83.8
*2831—Biological Products		
Alameda, Cal.	2	.7
Boone, Ind.	2	.4
Delaware, Pa.	1	.4
Los Angeles, Cal.	5	.3
Webster, Iowa	1	.2
Wyandotte, Kan.	4	.2
Buchanan, Mo.	3	.2
Lancaster, Pa.	1	.2
Wayne, Mich.	1	.2
Douglas, Neb.	4	.1
Cumberland, N. J.	3	.1
Total Above Counties	27	3.0
Industry Total	93	4.4
% of U. S.	29.0	68.2
*2833—Medicinal Chemicals, including Botanicals		
St. Louis City, Mo.	2	2.4
Union, N. J.	2	2.4
New London, Conn.	1	1.4
Northumberland, Pa.	1	.8
Rockingham, Va.	1	.8
Onondaga, N. Y.	1	.8
Hudson, N. J.	4	.5
Mercer, N. J.	1	.4
Monroe, N. Y.	1	.4
Cook, Ill.	11	.3
Essex, N. J.	3	.2
Bergen, N. J.	6	.2
Middlesex, N. J.	2	.2
Lee, Iowa	1	.2
Chenango, N. Y.	1	.2
Los Angeles, Cal.	11	.1
Total Above Counties	49	11.3
Industry Total	115	13.4
% of U. S.	42.6	84.3
*2834—Pharmaceutical Preparations		
Marion, Ind.	11	7.8
Kings, N. Y.	37	6.6
Philadelphia, Pa.	38	5.6
Wayne, Mich.	25	5.6
Rockland, N. Y.	3	4.6
Lake, Ill.	1	3.6
Middlesex, N. J.	4	3.3
Cook, Ill.	57	2.9
Kalamazoo, Mich.	2	2.9
Essex, N. J.	23	2.8
St. Louis City, Mo.	31	2.2
Elkhart, Ind.	3	2.0
Union, N. J.	4	1.9
Los Angeles, Cal.	79	1.9
Westchester, N. Y.	17	1.6
New York, N. Y.	84	1.5
Shelby, Tenn.	6	1.3
Rensselaer, N. Y.	2	1.2
Hamilton, Ohio	11	1.2
Chester, Pa.	2	.9
Total Above Counties	439	62.0
Industry Total	1,148	86.2
% of U. S.	38.2	71.9
*2841—Soap and Glycerin		
Hudson, N. J.	6	5.1
Cook, Ill.	25	3.1
Hamilton, Ohio	6	2.1
Wyandotte, Kan.	3	1.8
Clark, Ind.	1	1.3
Los Angeles, Cal.	17	1.2
Baltimore City, Md.	6	1.2
Lake, Ind.	1	1.1
Alameda, Cal.	6	.8
Middlesex, Mass.	11	.8
Richmond, N. Y.	1	.7
Philadelphia, Pa.	7	.6
Dallas, Tex.	6	.6
St. Louis City, Mo.	6	.5
Norfolk, Mass.	4	.4
Camden, N. J.	3	.4
Union, N. J.	3	.4
Fulton, Ga.	6	.3
New York, N. Y.	7	.2
Montgomery, Ohio	2	.2
Total Above Counties	131	22.8
Industry Total	282	25.3
% of U. S.	46.5	90.1
*2842—Cleaning and Polishing Products		
Cook, Ill.	82	1.4
Los Angeles, Cal.	94	1.3
Kings, N. Y.	38	1.0
Union, N. J.	9	.7
Wayne, Mich.	33	.6
Racine, Wis.	1	.6
St. Louis City, Mo.	31	.6
Marion, Ind.	6	.5
Philadelphia, Pa.	27	.4
Bergen, N. J.	11	.4
New York, N. Y.	35	.4
Middlesex, Mass.	15	.4
Morris, N. J.	2	.4
Hampshire, Mass.	1	.4
Suffolk, Mass.	23	.3
Cuyahoga, Ohio	37	.3
St. Louis, Mo.	5	.3
Hudson, N. J.	16	.3
Essex, Mass.	29	.3
Passaic, N. J.	10	.2
Total Above Counties	507	10.8
Industry Total	1,153	17.6
% of U. S.	44.0	61.4
*2843—Sulfonated Oils and Assistants		
Hudson, N. J.	5	.5
Philadelphia, Pa.	10	.2
Essex, N. J.	7	.2
Passaic, N. J.	5	.2
Polk, Ga.	1	.2
Hamilton, Tenn.	1	.2
Essex, Mass.	7	.1
Total Above Counties	36	1.6
Industry Total	98	2.0
% of U. S.	36.7	80.0
*2851—Paints and Varnishes		
Cook, Ill.	108	7.0
Los Angeles, Cal.	123	3.3
Cuyahoga, Ohio	53	3.3
Jefferson, Ky.	19	2.9
Wayne, Mich.	38	2.7
Essex, N. J.	54	2.7
Philadelphia, Pa.	40	2.3
Kings, N. Y.	88	1.8
Middlesex, N. J.	12	1.5
Alameda, Cal.	25	1.5

* Old SIC Code.

©SM, 1959.

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 28 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
San Francisco, Cal.	23	1.2
Allegheny, Pa.	18	1.2
Queens, N. Y.	26	1.1
St. Louis City, Mo.	28	1.1
Middlesex, Mass.	19	1.0
Milwaukee, Wis.	10	1.0
Clay, Mo.	7	1.0
Baltimore City, Md.	22	.9
Hudson, N. J.	26	.8
Harris, Tex.	15	.8
Total Above Counties	754	39.1
Industry Total	1,467	58.1
% of U. S.	51.4	67.3

***2852—Inorganic Color Pigments**

Middlesex, N. J.	4	1.7
St. Louis, Mo.	2	1.4
Carbon, Pa.	2	1.2
Baltimore City, Md.	2	.8
New Castle, Del.	1	.8
Warren, N. Y.	1	.8
Northampton, Pa.	2	.4
Montgomery, Kan.	1	.4
St. Clair, Ill.	1	.4
Camden, N. J.	1	.4
Amherst, Va.	1	.4
Lorain, Ohio	1	.4
Essex, N. J.	6	.3
Jasper, Mo.	1	.3
Montgomery, Ill.	2	.2
Kings, N. Y.	4	.2
Mercer, N. J.	1	.2
Bureau, Ill.	1	.2
Cherokee, Kan.	1	.2
Jefferson, Ky.	1	.2
Total Above Counties	35	10.9
Industry Total	104	13.0
% of U. S.	33.7	83.8

***2853—Whiting and Fillers**

Shelby, Tenn.	2	.2
Cook, Ill.	12	.1
Cuyahoga, Ohio	6	.1
Total Above Counties	20	.4
Industry Total	98	1.4
% of U. S.	20.4	28.6

***2861—Hardwood Distillation**

Dickinson, Mich.	1	.5
Marquette, Mich.	1	.4
Hickman, Tenn.	1	.2
Ashley, Ark.	1	.2
Shelby, Tenn.	1	.2
Total Above Counties	5	1.5
Industry Total	34	2.0
% of U. S.	14.7	75.0

***2862—Softwood Distillation**

Forrest, Miss.	2	.8
Glynn, Ga.	1	.6
Escambia, Fla.	1	.4
Pearl River, Miss.	1	.4
Allen, La.	1	.4
Beauregard, La.	1	.4
Duval, Fla.	1	.2
Covington, Ala.	1	.2
Harrison, Miss.	1	.2
Calcasieu, La.	1	.2
Marion, Miss.	1	.2
Total Above Counties	12	4.0
Industry Total	27	4.1
% of U. S.	44.4	97.6

***2863—Gum Naval Stores**

There are no counties with 100 or more employees in this industry.

Industry Total	26	.5

***2865—Tanning and Dyeing Materials**

Baltimore City, Md.	1	.2
Davidson, Tenn.	1	.2
Total Above Counties	2	.4
Industry Total	30	1.0
% of U. S.	6.7	40.0

***2871—Fertilizers**

Polk, Fla.	8	1.2
Jasper, Mo.	3	1.2
Harris, Tex.	4	1.0
Hillsborough, Fla.	2	.9
Middlesex, N. J.	3	.8
Baltimore City, Md.	5	.7
St. Clair, Ill.	6	.7
Charleston, S. C.	6	.7
Davidson, Tenn.	4	.6
Hamilton, Ohio	5	.5
South Norfolk City, Va.	5	.5
Marion, Ind.	5	.4
Franklin, Ohio	4	.4
Cook, Ill.	4	.4
Chatham, Ga.	5	.4
Fulton, Ga.	5	.4
Norfolk City, Va.	1	.4
Deer Lodge, Mont.	1	.4
Philadelphia, Pa.	2	.3
Jefferson, La.	2	.3
Total Above Counties	80	12.2
Industry Total	261	19.3
% of U. S.	30.7	63.2

***2872—Fertilizers, Mixing Only**

Baltimore City, Md.	5	.4
Los Angeles, Cal.	21	.4
New Hanover, N. C.	7	.3
Hillsborough, Fla.	7	.3
Orange, Fla.	11	.3
Alameda, Cal.	5	.2
Polk, Fla.	6	.2
Anne Arundel, Md.	2	.2
Clark, Ind.	1	.2
Portsmouth City, Va.	1	.2
Jefferson, Ky.	4	.2
South Norfolk City, Va.	4	.2
Terrell, Ga.	1	.2
Norfolk City, Va.	3	.2
Martin, N. C.	1	.2
Charleston, S. C.	5	.2
Alameda, Cal.	5	.2
Duval, Fla.	4	.1
Richland, S. C.	2	.1
Aroostook, Me.	6	.1
Total Above Counties	96	4.4
Industry Total	580	11.6
% of U. S.	16.6	37.9

***2881—Cottonseed Oil Mills**

Shelby, Tenn.	8	.6
Fresno, Cal.	3	.6
Lubbock, Tex.	3	.4
Hinds, Miss.	4	.3
Pulaski, Ark.	4	.2
Richmond, Ga.	3	.2
Tarrant, Tex.	2	.2
Montgomery, Ala.	3	.2
Coahoma, Miss.	2	.2
Leflore, Miss.	3	.2
Washington, Miss.	4	.2
Bibb, Ga.	3	.2
Terrell, Ga.	1	.1
Los Angeles, Cal.	1	.1
Nolan, Tex.	1	.1
Madera, Cal.	2	.1
Kern, Cal.	2	.1
Dallas, Ala.	2	.1
Fulton, Ga.	3	.1
Total Above Counties	58	4.2
Industry Total	286	13.0
% of U. S.	20.3	32.3

***2882—Linseed Oil Mills**

Hennepin, Minn.	3	.4
Erie, N. Y.	1	.2
Cuyahoga, Ohio	1	.2
Anoka, Minn.	1	.2
Total Above Counties	6	1.0
Industry Total	12	1.0
% of U. S.	50.0	100.0

***2883—Soybean Oil Mills**

Macon, Ill.	5	1.5
Cook, Ill.	4	.5
Vermilion, Ill.	1	.4
Bergen, N. J.	1	.4
Adams, Ind.	1	.4
Ford, Ill.	1	.4
Buchanan, Mo.	2	.3
Wright, Iowa	2	.2
Blue Earth, Minn.	2	.2
Lake, Ohio	1	.2
Polk, Iowa	2	.2
Hamilton, Ohio	1	.2
Marion, Ohio	1	.2
Marion, Ind.	1	.2
Jefferson, Ky.	1	.2
Clinton, Iowa	1	.2
McLean, Ill.	2	.1
Linn, Iowa	2	.1
Total Above Counties	31	5.9
Industry Total	88	6.9
% of U. S.	35.2	85.5

***2884—Vegetable Oil Mills, N.E.C.**

Morris, N. J.	1	.7
Hudson, N. J.	3	.4
St. Louis City, Mo.	1	.2
Norfolk City, Va.	1	.2
Jackson, Fla.	1	.2
Los Angeles, Cal.	5	.1
Total Above Counties	12	1.8
Industry Total	51	2.0
% of U. S.	23.5	90.0

***2888—Grease and Tallow**

Queens, N. Y.	4	.8
Philadelphia, Pa.	10	.7
Cook, Ill.	6	.6
Hudson, N. J.	6	.6
Los Angeles, Cal.	9	.5
Wayne, Mich.	6	.5
Peoria, Ill.	1	.2
Hamilton, Ohio	2	.2
Franklin, Ohio	1	.2
Marion, Ind.	1	.2
Cuyahoga, Ohio	3	.2
Onondaga, N. Y.	2	.2
Webster, Iowa	2	.2
Middlesex, Mass.	6	.1
Erie, N. Y.	5	.1
Kings, N. Y.	4	.1
Essex, N. J.	5	.1
Suffolk, Mass.	2	.1
San Francisco, Cal.	4	.1
Total Above Counties	79	5.7
Industry Total	503	11.1
% of U. S.	15.7	51.4

***2887—Fatty Acids**

Cook, Ill.	3	.6
Hamilton, Ohio	1	.4
Essex, N. J.	1	.2
Philadelphia, Pa.	4	.2
Lake, Ind.	1	.2
Kankakee, Ill.	1	.2
Total Above Counties	11	1.8
Industry Total	17	1.8
% of U. S.	64.7	100.0

***2889—Animal Oils, N.E.C.**

Sussex, Del.	2	.3
Carteret, N. C.	3	.2
Monmouth, N. J.	1	.2
Wayne, Mich.	1	.2
Jefferson, Tex.	1	.1
Plaquemines, La.	2	.1
Brunswick, N. C.	2	.1
Cameron, La.	2	.1
Suffolk, N. Y.	2	.1
Northumberland, Va.	2	.1
Total Above Counties	18	1.5
Industry Total	61	2.3
% of U. S.	29.5	65.2

***2891—Printing Ink**

Cook, Ill.	39	2.0
New York, N. Y.	25	.9
Philadelphia, Pa.	18	.5
Alameda, Cal.	4	.5
Union, N. J.	7	.5
Bergen, N. J.	9	.5
Passaic, N. J.	4	.4
Hamilton, Ohio	8	.3
Cuyahoga, Ohio	8	.2
St. Louis City, Mo.	6	.2
Kings, N. Y.	14	.2
Hudson, N. J.	6	.2
Los Angeles, Cal.	15	.2
Total Above Counties	161	6.6
Industry Total	266	9.2
% of U. S.	60.1	71.7

***2892—Essential Oils**

New York, N. Y.	11	.1
Union, N. J.	2	.1
Total Above Counties	13	.2
Industry Total	37	1.0
% of U. S.	35.1	20.0

***2893—Toilet Preparations**

New York, N. Y.	112	3.7
Cook, Ill.	67	2.5
Los Angeles, Cal.	73	1.6
Ramsey, Minn.	8	1.6
Passaic, N. J.	6	1.2
Hamilton, Ohio	5	1.1
Essex, N. J.	14	1.1
Bronx, N. Y.	12	1.0
Union, N. J.	5	.9
Fairfield, Conn.	7	.8
Rockland, N. Y.	1	.7
Hudson, N. J.	13	.7
Queens, N. Y.	16	.7
Orange, N. Y.	4	.5
Nassau, N. Y.	6	.5
Middlesex, Conn.	2	.4
Logan, Ill.	1	.4
Morris, N. J.	1	.4
Kings, N. Y.	25	.4
Suffolk, Mass.	3	.4
Total Above Counties	381	20.6
Industry Total	710	28.4
% of U. S.	53.7	76.0

***2894—Glue and Gelatine**

Cook, Ill.	26	.9
Middlesex, Mass.	12	.8

* Old SIC Code.

©SM, 1959.

Manufacture of Chemicals & Allied Products—SIC 28—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 28 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Essex, Mass.	6	.6
Milwaukee, Wis.	5	.4
Cattaraugus, N. Y.	1	.4
Kings, N. Y.	10	.4
New York, N. Y.	12	.3
Philadelphia, Pa.	5	.2
Wayne, Mich.	3	.2
Berks, Pa.	1	.2
Union, N. J.	1	.2
San Mateo, Cal.	2	.2
Camden, N. J.	1	.2
Cuyahoga, Ohio	5	.1
Erie, N. Y.	2	.1
Total Above Counties	98	5.2
Industry Total	226	7.0
% of U. S.	43.6	74.3

*2865—Carbon Black		
Hutchinson, Tex.	3	.7
Harris, Tex.	3	.3
Ouachita, La.	2	.2
St. Martin, La.	3	.2
Grant, Kan.	2	.2
Arkansas, Tex.	1	.2
Ector, Tex.	1	.2
Lea, N. M.	4	.2
Evangeline, La.	1	.2
Gray, Tex.	4	.2
Montgomery, Tex.	1	.2
Moore, Tex.	2	.2
Total Above Counties	27	3.0
Industry Total	47	3.5
% of U. S.	57.4	85.7

*2895—Compressed and Liquefied Gases		
Erie, N. Y.	7	2.3
Jefferson, Ky.	2	.6
Hudson, N. J.	7	.7
Los Angeles, Cal.	11	.5
Cook, Ill.	9	.5
Harris, Tex.	7	.4
Cuyahoga, Ohio	5	.4
St. Louis City, Mo.	7	.3
Delaware, Pa.	2	.3
Baltimore City, City	6	.3
Allegheny, Pa.	7	.3
Essex, N. J.	2	.3
Wayne, Mich.	7	.3
Armstrong, Pa.	1	.3
Philadelphia, Pa.	4	.2
Lake, Ind.	3	.2
Prince Georges, Md.	2	.2
Alameda, Cal.	6	.2
Denver, Col.	7	.2
Hamilton, Ohio	6	.1
Total Above Counties	108	8.8
Industry Total	429	11.3
% of U. S.	25.2	77.9

*2897—Insecticides and Fungicides		
Adams, Col.	1	.7
Harris, Tex.	4	.4
Niagara, N. Y.	2	.4
Los Angeles, Cal.	13	.3
Contra Costa, Cal.	3	.3
Baltimore City, Md.	4	.3
Duval, Fla.	2	.2
Allegheny, Pa.	1	.2
Fresno, Cal.	2	.2
Henrico, Va.	1	.2
Jefferson, Ky.	2	.2
Hillsborough, Fla.	3	.1
Total Above Counties	38	3.5
Industry Total	265	6.9
% of U. S.	14.3	50.7

*2895—Salt		
Alameda, Cal.	4	.5
Manistee, Mich.	2	.5
Reno, Kan.	3	.5
St. Clair, Mich.	2	.5
Wayne, Ohio	1	.4
Van Zandt, Tex.	1	.4
Schuyler, N. Y.	2	.3
Wyoming, N. Y.	1	.2
Summit, Ohio	1	.2
Salt Lake, Utah	1	.2
Tompkins, N. Y.	2	.2
Total Above Counties	20	3.9
Industry Total	38	4.4
% of U. S.	52.6	88.6

*2899—Chemical Products, N.E.C.		
Cook, Ill.	99	2.3
Cuyahoga, Ohio	46	1.4
Los Angeles, Cal.	60	1.1
New York, N. Y.	53	.8
Philadelphia, Pa.	23	.8
Fairfield, Conn.	7	.7
Lake, Ohio	2	.7
Vigo, Ind.	3	.7
Hudson, N. J.	20	.6
Queens, N. Y.	18	.5
Kings, N. Y.	37	.5
Montgomery, Pa.	6	.5
Middlesex, Mass.	14	.5
Essex, N. J.	23	.4
Allegheny, Pa.	15	.4
Butler, Pa.	1	.4
Washington, Minn.	1	.4
St. Louis, Mo.	6	.4
Harris, Tex.	15	.3
Wayne, Mich.	23	.3
Total Above Counties	492	13.6
Industry Total	1,191	24.8
% of U. S.	41.3	54.8

Manufacture of Petroleum & Coal Products—SIC 29

Selling to SIC 29 . . .

By A. J. KELLY,
General Manager, Purchasing Department
Esso Standard Oil Co.

Purchasing departments of companies whose business is the development and exploitation of natural resources are more concerned with buying construction, maintenance, and operating supplies than components of the finished product.

In such highly competitive industries the control of costs is a constant and paramount aim. Hence our buying must be competitive, with a consideration of quality, service and price.

The present availability of good markets in many sections of the country encourages a trend to decentralize much of the purchasing function. Such tendency may increase the work of the salesman. Probably, where purchases are very large and the customer has widely scattered plants, more buying will be done at the scene of operations. The main purchasing office will handle bulk and special requirements, and will become a staff operation responsible for all company purchasing.

It is to the mutual interest of purchasing and sales people that they understand each other's problems and thereby engender better performance and mutual respect.

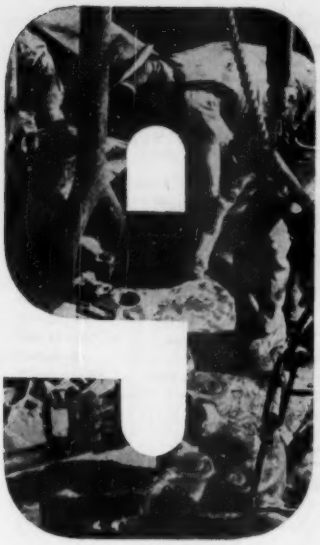
Aside from such personal qualities as honesty, reliability and good personality, salesmen should develop those traits of business service expected by buyers. They should try to attain a basic knowledge of each customer's operations, its material and equipment needs, and the application and development of their products to the customer's needs. The highly successful salesman has such knowledge coupled with sound commercial sense, and a keen, loyal ability to serve his company and customer's mutual interest. Such men are the outstanding few seen at the top of any field of endeavor.

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 29

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*2911—Petroleum Refining		
Jefferson, Tex.	7	17.5
Harris, Tex.	12	11.6
Lake, Ind.	5	10.3
Los Angeles, Cal.	30	9.3
Contra Costa, Cal.	4	8.9
East Baton Rouge, La.	3	6.8
Delaware, Pa.	2	6.2
Philadelphia, Pa.	3	6.2
Madison, Ill.	3	5.6
Union, N. J.	2	5.0
Galveston, Tex.	4	3.9
Kay, Okla.	2	3.5
Calcasieu, La.	4	3.5

* Old SIC Code.

©SM, 1959.



9 OUT OF 10 MEN





in Oil Drilling-Producing Prefer the COMPOSITE CATALOG

Year after year continuing surveys among oil men prove that they prefer to have their catalog data available in the handy, convenient COMPOSITE CATALOG. The most recent survey showed that 95% of the 2,785 oil men replying preferred the COMPOSITE CATALOG over individual catalogs, separate bulletins, loose-leaf binders, etc.

Because the oil drilling-producing industry is on a 7-days-a-week, 24-hours-a-day basis, it's impossible for your salesmen to be always on the spot when your customers and prospects have a need for your kind of product or service. These men need the facts, data and specifications readily available in the most convenient and most practical form—in the COMPOSITE CATALOG.

COMPOSITE CATALOG places copies of this 5,300-page volume at 14,000 buying locations . . . used by more than 30,000 people. This pinpoint distribution is made possible by the cooperation of oil companies themselves. COMPOSITE CATALOG can show documented coverage of men in companies responsible for 98% of purchases in the oil drilling-producing industry.

All costs considered, the COMPOSITE CATALOG offers the most reasonable method of placing your product information in the hands of known buyers . . . actually costs less than producing and distributing the material yourself. Preprints and reprints for your salesmen's use can be furnished at nominal cost. *Remember—the most expensive catalog is the one that isn't there when a purchase is being considered!*

There's still time to get in the next edition. Write now for the COMPOSITE CATALOG Data File which contains complete rate and distribution information plus helpful suggestions on better catalog production.

Greater Petroleum Coverage Through Market Specialization

COMPOSITE CATALOG

OF OIL FIELD EQUIPMENT & SERVICES
Published by WORLD OIL



GULF PUBLISHING COMPANY
World's Largest Specialized Publisher to the Oil Industries
HOUSTON, NEW YORK, CHICAGO, CLEVELAND, TULSA, DALLAS, LOS ANGELES, LONDON AND HANNOVER

Manufacture of Petroleum & Coal Products—SIC 29—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 29 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou. 1958)
Gloucester, N. J.	2	3.2
Will, Ill.	2	2.0
Baltimore City, Md.	4	1.9
Union, Ark.	4	1.9
St. Charles, La.	2	1.8
Hutchinson, Tex.	4	1.8
Butler, Kan.	5	1.7
Total Above Counties	104	113.1
Industry Total	409	144.4
% of U. S.	25.4	78.3
*2831—Beehive Coke Ovens		
Fayette, Pa.	15	.2
Westmoreland, Pa.	10	.1
Total Above Counties	25	.3
Industry Total	40	.6
% of U. S.	62.5	50.0
*2832—Byproduct Coke Ovens		
Allegheny, Pa.	3	4.3
Lake, Ind.	3	3.5
Jefferson, Ala.	5	2.5
Erie, N. Y.	3	1.7
Wayne, Mich.	4	1.3
Baltimore, Md.	1	1.1
Beaver, Pa.	2	1.0
Cook, Ill.	4	1.0
Mahoning, Ohio	3	.9
Utah, Utah	2	.9
Cuyahoga, Ohio	3	.8
Middlesex, Mass.	1	.7
Brooke, W. Va.	1	.7
Hancock, W. Va.	1	.7
Cambria, Pa.	1	.7
Hudson, N. J.	1	.6
New Haven, Conn.	1	.4
Lucas, Ohio	1	.4
Trumbull, Ohio	1	.4
Montgomery, Pa.	1	.4
Total Above Counties	42	24.0
Industry Total	79	30.7
% of U. S.	53.2	78.2
*2851—Paving Mixtures and Blocks		
Los Angeles, Cal.	13	.2
Cook, Ill.	4	.2
Prince Georges, Md.	2	.2
Kankakee, Ill.	1	.2
Jefferson, Ala.	2	.1
Middlesex, Mass.	3	.1
Washington, Md.	1	.1
Wayne, Mich.	3	.1
St. Louis, Mo.	2	.1
Total Above Counties	31	1.3
Industry Total	328	3.9
% of U. S.	9.5	33.3
*2852—Roofing Felts and Coating		
Cook, Ill.	15	1.3
Hamilton, Ohio	1	1.0
Los Angeles, Cal.	12	.9
Will, Ill.	4	.9
Orleans, La.	1	.7
Chatham, Ga.	2	.7
Bergen, N. J.	1	.7
Dallas, Tex.	5	.5
Somerset, N. J.	2	.5
Cuyahoga, Ohio	8	.4
Hennepin, Minn.	5	.4
Norfolk, Mass.	2	.4
Lake, Ill.	1	.4
Alameda, Cal.	3	.4
Philadelphia, Pa.	4	.3
York, Pa.	4	.3
Contra Costa, Cal.	2	.3
Jackson, Md.	2	.3
Caddo, La.	1	.3
Fairfield, Conn.	1	.2
Total Above Counties	76	10.9
Industry Total	197	15.2
% of U. S.	38.6	71.7
*2992—Lubricants, N.E.C.		
Camden, N. J.	2	1.0
Cook, Ill.	25	.9
Cuyahoga, Ohio	17	.8
Philadelphia, Pa.	17	.8
Tarrant, Tex.	3	.4
Los Angeles, Cal.	24	.4
Montgomery, Pa.	1	.4
Essex, N. J.	4	.3
Jefferson, La.	3	.3
Allegheny, Pa.	7	.2
Union, N. J.	6	.2
Wayne, Mich.	13	.2
Sedgwick, Kan.	1	.2
Milwaukee, Wis.	7	.2
Middlesex, N. J.	2	.2
Montgomery, Ohio	1	.2
Oklahoma, Okla.	1	.2
Erie, N. Y.	2	.1
St. Louis City, Mo.	11	.1
Venango, Pa.	2	.1
Total Above Counties	149	7.2
Industry Total	332	7.5
% of U. S.	44.9	96.0
*2999—Petroleum and Coal Products, N.E.C.		
St. Louis City, Mo.	4	.4
Cook, Ill.	3	.2
Allegheny, Pa.	2	.2
Jefferson, Tex.	1	.2
Jackson, Mich.	1	.2
Will, Ill.	1	.2
Middlesex, N. J.	2	.1
McDowell, W. Va.	1	.1
Harris, Tex.	1	.1
Wayne, Mich.	2	.1
Total Above Counties	18	1.8
Industry Total	47	1.8
% of U. S.	38.3	100.0

* Old SIC Code.

©SM, 1959.

Manufacture of Rubber Products—SIC 30

Selling to SIC 30 . . .

By T. G. PATERSON, JR.,
Purchasing Agent
The Bates Rubber Co.

The rubber industry needs new ideas and new products in these basic areas:

1. Raw materials, predominantly chemical or petrochemical.
2. Manufacturing equipment, with emphasis on automation and investment return.
3. MRO supplies in infinite variety.
4. Resale products to fill out market lines where it's more economical to buy than to make.
5. Non-rubber components, hose couplings, sheaves, metal inserts, etc.
6. Merchandising accessories, advertising and sales promotion aids.

In rubber, purchasing is basically a centralized function with top management status in the home office. Branch-plant purchasing agents are of high caliber, but with varying degrees of authority. In general, they control all purchases except basic raw-material contracts, and major equipment.

The industry looks more and more to its suppliers for ideas. It welcomes salespeople who, working with and through the purchasing department, can join buyers, technicians and engineers in shirt-sleeve sessions, to discuss future as well as current requirements. This demands sales (and buying) personnel of high ethical standard. Today's seller-buyer teams frequently work in a confidential atmosphere where each has accurate knowledge of what the other competitor is doing. In such working contacts there is no place for the untrustworthy man on either side. Confidential information must not leak.

Any salesman who believes he has something to offer the buyer should have a prompt, uninterrupted interview, but, in return, he should know what the buyer's company can do with it, how and why it will profit the company to buy.

The rubber industry must spend considerable time before accepting any new material that becomes a part of its product. Costly evaluation and product testing are necessary. Consequently there is a definite trend toward fewer alternate sources of supply for any one item. Experience shows improved uniformity of quality, better service on orders, and closer technical-assistance results. Failure of a supplier in any of these areas can and does result in disapproval.

Some of the best potential areas for well directed sales effort in the industry are the continuing needs for (1) well-located sources of plastic and metal components, (2) improved materials-handling methods, (3) better raw-material and finished-product packaging, (4) special-purpose raw materials for Space-Age rubber products, (5) economical labor-saving paperwork systems for expanding companies, (6) improved metals and methods for faster production of accurate long-life dies and molds.

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 30 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*3011—Tires and Inner Tubes		
Summit, Ohio	6	34.8
Los Angeles, Cal.	6	9.9
Wayne, Mich.	1	7.0
Montgomery, Pa.	3	4.1
Shelby, Tenn.	1	3.7
Eau Claire, Wis.	1	3.2
Etowah, Ala.	1	3.2
Hampden, Mass.	1	3.0
Polk, Iowa	2	2.8
Richland, Ohio	1	2.4
Allegany, Md.	1	2.0
Shawnee, Kan.	1	1.7
Tuscaloosa, Ala.	1	1.5
Erie, N. Y.	1	1.4
McLennan, Tex.	1	1.4
Marion, Ind.	1	1.4
Hancock, Ohio	1	1.3
Ottawa, Okla.	1	1.3
Jackson, Mich.	1	1.3
New Haven, Conn.	1	1.0
Total Above Counties	33	88.4
Industry Total	49	88.4
% of U. S.	67.3	100.0
*3021—Rubber Footwear		
Middlesex, Mass.	2	4.9
Harford, Md.	1	1.2
Rock Island, Ill.	1	.9
New Haven, Conn.	1	.9
La Crosse, Wis.	1	.7
Broome, N. Y.	2	.7
Essex, Mass.	2	.7
Bristol, R. I.	1	.7
Middlesex, Conn.	1	.7
Carroll, Md.	1	.6
Gibson, Tenn.	1	.6
Adams, Pa.	1	.5
Orange, Cal.	1	.4
Norfolk, Mass.	1	.4
Hamilton, Ohio	1	.2
Davidson, Tenn.	1	.2
Providence, R. I.	1	.2
Total Above Counties	20	14.5
Industry Total	22	14.5
% of U. S.	90.9	100.0
*3031—Reclaimed Footwear		
Summit, Ohio	3	1.2
Erie, N. Y.	2	.5
Morris, N. J.	1	.4
Los Angeles, Cal.	3	.2
St. Clair, Ill.	1	.2
Shelby, Tenn.	1	.2
Hancock, Ohio	1	.2
Total Above Counties	12	2.9
Industry Total	19	3.0
% of U. S.	63.2	96.7
*3099—Rubber Industries, N.E.C.		
Summit, Ohio	37	12.0
New Castle, Del.	3	5.9
Fairfield, Conn.	21	5.8
St. Joseph, Ind.	5	5.1
Passaic, N. J.	14	5.1
Middlesex, Mass.	27	4.8
Montgomery, Ohio	6	4.7
Bristol, Mass.	8	4.5
Los Angeles, Cal.	124	4.4
Cook, Ill.	76	4.3
Denver, Col.	3	4.2
Providence, R. I.	11	3.8
Mercer, N. J.	13	3.6
Philadelphia, Pa.	29	2.7
Norfolk, Mass.	16	2.7
New Haven, Conn.	16	2.3
Auglaize, Ohio	4	2.0
Wayne, N. Y.	1	1.9
Allen, Ind.	3	1.9
Tippecanoe, Ind.	1	1.7
Total Above Counties	420	83.4
Industry Total	1,316	135.7
% of U. S.	31.9	61.7

Manufacture of Leather & Leather Products—SIC 31

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 31

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*3111—Leather Tanning and Finishing		
Essex, Mass.	138	6.0
Milwaukee, Wis.	21	2.1
New Castle, Del.	7	2.0
Cook, Ill.	24	1.8
Philadelphia, Pa.	12	1.8
Middlesex, Mass.	9	1.7
Essex, N. J.	39	1.7
Fulton, N. Y.	50	1.3
Broome, N. Y.	4	1.1
Camden, N. J.	6	1.1
Tioga, Pa.	2	1.0
Sheboygan, Wis.	1	.7
Chippewa, Mich.	1	.7
Trumbull, Ohio	1	.7
Hillsborough, N. H.	4	.5
Suffolk, Mass.	20	.4
Ashtabula, Ohio	3	.4
Fond du Lac, Wis.	1	.4
Ottawa, Mich.	1	.4
Goodhue, Minn.	1	.4
Total Above Counties	392	26.2
Industry Total	572	37.7
% of U. S.	68.5	69.5
*3121—Industrial Leather Belting		
Wayne, Mich.	4	.7
Van Wert, Ohio	1	.6
San Mateo, Cal.	1	.6
Kane, Ill.	1	.4
New York, N. Y.	13	.3
Cook, Ill.	4	.2
Merrimack, N. H.	1	.2
Worcester, Mass.	5	.2
Philadelphia, Pa.	3	.1
Total Above Counties	33	3.3
Industry Total	131	4.7
% of U. S.	25.2	70.2
*3131—Footwear Cutstock		
Essex, Mass.	130	4.3
St. Louis City, Mo.	22	2.4
Plymouth, Mass.	63	2.0
Suffolk, Mass.	51	1.3
Broome, N. Y.	16	1.3
Middlesex, Mass.	24	1.0
Kings, N. Y.	25	.8
Androscoggin, Me.	18	.6
Hillsborough, N. H.	17	.6
Worcester, Mass.	8	.4
Oxford, Me.	1	.4
York, Pa.	5	.4
Strafford, N. H.	9	.4
Lycoming, Pa.	1	.4
Davidson, Tenn.	4	.3
New York, N. Y.	32	.3
Milwaukee, Wis.	5	.2
White, Ark.	1	.2
Los Angeles, Cal.	12	.2
York, Me.	4	.2
Total Above Counties	448	17.7
Industry Total	563	22.8
% of U. S.	79.6	77.6
*3141—Footwear, Except Rubber		
Essex, Mass.	95	15.3
Broome, N. Y.	21	14.1
Middlesex, Mass.	39	9.7
Hillsborough, N. H.	22	9.3
Plymouth, Mass.	34	7.8
Androscoggin, Me.	21	7.0
Worcester, Mass.	16	6.0
St. Louis City, Mo.	25	5.9
Cook, Ill.	16	4.0
Strafford, N. H.	8	3.7
Scioto, Ohio	3	3.6
Suffolk, Mass.	26	3.5
New York, N. Y.	79	3.3
Lancaster, Pa.	19	3.2
Milwaukee, Wis.	14	3.1
Franklin, Mo.	9	3.0
Kings, N. Y.	51	2.9
Rockingham, N. H.	15	2.7
Campbell, Va.	4	2.6
Los Angeles, Cal.	44	2.3
Total Above Counties	561	113.0
Industry Total	1,196	214.0
% of U. S.	46.9	52.8
*3142—House Slippers		
Kings, N. Y.	32	1.0
New York, N. Y.	28	1.0
Herkimer, N. Y.	2	.9
Franklin, N. Y.	3	.6
Middlesex, Mass.	5	.6
Essex, Mass.	13	.6
Worcester, Mass.	7	.5
Bergen, N. J.	2	.4
Haywood, N. C.	1	.4
Washington, Md.	1	.4
Orange, N. Y.	1	.4
Cook, Ill.	8	.3
Hillsborough, N. H.	1	.2
Suffolk, Mass.	6	.2
Fairfield, Conn.	3	.2
Susquehanna, Pa.	1	.2
Franklin, Ohio	1	.2
Manistee, Mich.	1	.2
Hudson, N. J.	2	.2
Franklin, Mo.	1	.2
Total Above Counties	119	8.9
Industry Total	173	10.7
% of U. S.	68.8	83.2
*3151—Leather Dress Gloves		
Fulton, N. Y.	89	3.2
Marinette, Wis.	1	.2
Washington, Tenn.	1	.2
Sheboygan, Wis.	2	.2
Gogebic, Mich.	1	.2
New York, N. Y.	14	.2
Los Angeles, Cal.	3	.1
Rutland, Vt.	2	.1
Milwaukee, Wis.	4	.1
Total Above Counties	117	4.5
Industry Total	143	4.6
% of U. S.	81.8	97.8
*3152—Leather Work Gloves		
Cook, Ill.	8	.2
Grafton, N. H.	1	.2
La Porte, Ind.	1	.2
Cass, Ill.	1	.2
Montcalm, Mich.	1	.2
Franklin, Tex.	1	.1
Milwaukee, Wis.	6	.1
Brown, Wis.	2	.1
Total Above Counties	21	1.3
Industry Total	96	2.5
% of U. S.	21.9	52.6
*3161—Luggage		
New York, N. Y.	152	2.6
Cook, Ill.	64	1.6
Denver, Col.	5	1.6
Kings, N. Y.	32	.8
Jackson, Mo.	6	.8
Bronx, N. Y.	9	.7
Essex, N. J.	19	.6
Middlesex, N. J.	2	.4
Philadelphia, Pa.	21	.4
Mercer, N. J.	3	.4
Bristol, Mass.	3	.4
Los Angeles, Cal.	25	.4
Petersburg City, Va.	1	.4
Hudson, N. J.	5	.3
King, Wash.	5	.3
Middlesex, Mass.	6	.3
Racine, Wis.	5	.3
Kent, R. I.	1	.2
Polk, Iowa	1	.2
Marin, Cal.	1	.2
Total Above Counties	386	12.9
Industry Total	487	15.0
% of U. S.	75.2	86.0
*3171—Handbags and Purses		
New York, N. Y.	386	9.4

* Old SIC Code.

©SM, 1959.

Manufacture of Leather & Leather Products—SIC 31—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 31 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Kings, N. Y.	71	2.0
Orange, N. Y.	23	1.3
St. Louis City, Mo.	13	.9
Middlesex, N. J.	14	.8
Los Angeles, Cal.	27	.7
Norfolk, Mass.	1	.7
Bristol, Mass.	4	.6
Morris, N. J.	4	.6
Hudson, N. J.	14	.6
Union, N. J.	4	.5
Fairfield, Conn.	7	.5
Philadelphia, Pa.	8	.4
Bergen, N. J.	2	.4
Columbia, N. Y.	1	.4
Queens, N. Y.	4	.4
Onondaga, N. Y.	2	.2
Montgomery, Pa.	4	.2
Door, Wis.	1	.2
Suffolk, Mass.	15	.2
Total Above Counties	603	21.0
Industry Total	714	23.1
% of U. S.	84.5	90.9

***3172—Small Leather Goods**

New York, N. Y.	108	1.7
Essex, N. J.	7	.7
Washington, Wis.	3	.5
Hampden, Mass.	2	.4
Philadelphia, Pa.	4	.4
Bronx, N. Y.	3	.4
St. Louis City, Mo.	2	.4
Berks, Pa.	1	.3
Kings, N. Y.	18	.3
Cook, Ill.	13	.2
Hudson, N. J.	2	.2
Fulton, N. Y.	2	.2
Passaic, N. J.	2	.2
Ste. Genevieve, Mo.	1	.2
Total Above Counties	168	6.1
Industry Total	256	6.6
% of U. S.	65.6	92.4

***3192—Saddlery, Harness and Whips**

Polk, Iowa	1	.2
Gwinnett, Ga.	1	.2
Hamilton, Tenn.	2	.1
Total Above Counties	4	.5
Industry Total	106	.9
% of U. S.	3.8	55.6

***3199—Leather Goods, N.E.C.**

New York, N. Y.	120	1.5
Cook, Ill.	28	.3
Kings, N. Y.	25	.3
Los Angeles, Cal.	25	.2
Suffolk, Mass.	6	.2
Santa Clara, Cal.	1	.2
Philadelphia, Pa.	14	.1
Hamilton, Ohio	3	.1
Bronx, N. Y.	7	.1
Essex, Mass.	8	.1
Nassau, N. Y.	2	.1
Dallas, Tex.	2	.1
Total Above Counties	239	3.9
Industry Total	386	4.2
% of U. S.	61.9	78.

Manufacture of Stone, Clay & Glass Products—SIC 32

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 32

***3211—Flat Glass**

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Allegheny, Pa.	2	3.1
Armstrong, Pa.	3	2.7
Jefferson, Mo.	1	2.3
Harrison, W. Va.	3	2.0
La Salle, Ill.	1	1.9
Wood, Ohio	1	1.7
Wayne, Mich.	1	1.7
Kanawha, W. Va.	1	1.5
Okmulgee, Okla.	3	1.1
Westmoreland, Pa.	2	1.1
Sebastian, Ark.	1	.7
Knox, Ohio	1	.7
Sullivan, Tenn.	1	.7
Caddo, La.	1	.7
St. Louis City, Mo.	1	.4
Knox, Ind.	1	.4
Macon, Ill.	1	.3
Butler, Pa.	1	.2
Ramsey, Minn.	1	.2
Orange, Cal.	1	.2
Total Above Counties	28	23.6
Industry Total	33	23.6
% of U. S.	84.8	100.0

***3221—Glass Containers**

Cumberland, N. J.	5	4.8
Washington, Pa.	4	3.4
Alameda, Cal.	3	3.1
Madison, Ill.	1	3.0
La Salle, Ill.	2	2.7
Los Angeles, Cal.	7	2.7
Delaware, Ind.	1	2.0
Grant, Ind.	3	1.8
Baltimore City, Md.	4	1.7
Kanawha, W. Va.	1	1.5
Salem, N. J.	2	1.5
Muskingum, Ohio	2	1.5
Cabell, W. Va.	3	1.4
Marion, W. Va.	2	1.4
Fayette, Pa.	1	1.2
Randolph, Ind.	1	1.1
Chemung, N. Y.	1	1.1
Jefferson, Pa.	2	1.1
Clarion, Pa.	2	.9
Wood, W. Va.	1	.8
Total Above Counties	48	38.7
Industry Total	88	51.9
% of U. S.	56.5	74.6

***3229—Pressed and Blown Glassware, N.E.C.**

Steuben, N. Y.	3	8.2
Fairfield, Ohio	5	4.6
Westmoreland, Pa.	8	2.4
Franklin, Ohio	2	2.2
Cumberland, N. J.	21	2.0
Harrison, W. Va.	2	1.8
Washington, Pa.	3	1.7
Providence, R. I.	8	1.6
Lucas, Ohio	2	1.6
Anderson, S. C.	1	1.5
Wood, W. Va.	4	1.5
Belmont, Ohio	2	1.0
Allegheny, Pa.	6	1.0
Lewis, W. Va.	4	.8
Tioga, Pa.	1	.7
Huntingdon, Pa.	1	.7
Jay, Ind.	1	.7
Calhoun, Mich.	1	.7
Santa Clara, Cal.	1	.6
Laurens, S. C.	1	.6
Total Above Counties	75	35.9
Industry Total	287	45.0
% of U. S.	26.1	79.8

***3231—Products of Purchased Glass**

Lucas, Ohio	4	1.9
Wood, Ohio	3	1.7
Davidson, Tenn.	1	1.7
Cook, Ill.	99	1.6
New York, N. Y.	108	1.4
La Salle, Ill.	1	1.1
Los Angeles, Cal.	47	1.1
Wayne, Mich.	12	.8
Kings, N. Y.	67	.8
Allegheny, Pa.	21	.8
Philadelphia, Pa.	24	.6
Erie, N. Y.	8	.4
McKean, Pa.	1	.4
Hartford, Conn.	3	.4
Fayette, Pa.	1	.4
Wilkes, N. C.	1	.4
Hamilton, Ohio	11	.3
Bronx, N. Y.	16	.3
Hudson, N. J.	9	.3
New Haven, Conn.	7	.3
Total Above Counties	404	16.4
Industry Total	858	22.1
% of U. S.	47.1	74.2

***3241—Cement, Hydraulic**

Northampton, Pa.	12	3.6
San Bernardino, Cal.	3	1.4
Lake, Ind.	1	1.2
Alpena, Mich.	1	1.2
La Salle, Ill.	3	1.2
Lehigh, Pa.	4	1.2
Jefferson, Ala.	5	1.1
Cerro Gordo, Iowa	2	1.0
Los Angeles, Cal.	2	.7
Harris, Tex.	3	.7
St. Louis City, Mo.	2	.7
Clark, Ind.	1	.7
Columbia, N. Y.	2	.7
Santa Clara, Cal.	1	.7
Erie, N. Y.	3	.6
Dallas, Tex.	3	.5
Allegheny, Pa.	2	.5
Allen, Kan.	2	.5
Hamilton, Tenn.	1	.5
Pulaski, Ark.	1	.5
Total Above Counties	54	19.2
Industry Total	162	40.3
% of U. S.	33.3	47.6

***3251—Brick and Hollow Tile**

Clay, Ind.	7	1.3
Stark, Ohio	6	.9
Cook, Ill.	7	.7
Tuscarawas, Ohio	8	.6
Los Angeles, Cal.	10	.6
Hot Spring, Ark.	3	.6
Denver, Col.	3	.5
Bibb, Ga.	2	.5
Richmond, Ga.	2	.5
Bastrop, Tex.	2	.5
Davidson, Tenn.	2	.4
Beaver, Pa.	5	.4
Albany, N. Y.	3	.4
Ulster, N. Y.	6	.4
Jefferson, Ala.	5	.3
Columbia, Ohio	3	.3
Middlesex, N. J.	3	.3
New Haven, Conn.	3	.3
Carroll, Ohio	3	.3
Lee, N. C.	4	.3
Total Above Counties	89	10.1
Industry Total	610	30.3
% of U. S.	14.6	33.3

***3253—Clay Floor and Wall Tile**

Los Angeles, Cal.	9	2.5
Muskingum, Ohio	1	1.5
Stark, Ohio	2	1.5
Montgomery, Pa.	1	.7
Monmouth, N. J.	2	.5
Bucks, Pa.	2	.4
Worcester, Mass.	1	.4
Cattaraugus, N. Y.	1	.4
Madison, Ind.	1	.4
Ohio, W. Va.	1	.4
Hamilton, Ohio	1	.3
Contra Costa, Cal.	1	.3
Pulaski, Ark.	1	.2
Mercer, N. J.	2	.2
Riverside, Cal.	1	.2
Cowley, Kan.	1	.2
Dallas, Tex.	2	.2
Lauderdale, Ala.	1	.2
Tarrant, Tex.	2	.2

* Old SIC Code.

©SM, 1959.

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 32 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Weed, W. Va.	1	.2
Total Above Counties	34	10.9
Industry Total	49	11.1
% of U. S.	69.4	98.2
*3254—Clay Sewer Pipe		
Tuscarawas, Ohio	11	2.5
Placer, Cal.	1	.4
Los Angeles, Cal.	3	.4
Jefferson, Ohio	4	.4
Clay, Ind.	2	.3
St. Louis City, Mo.	3	.3
Columbiana, Ohio	2	.3
Daviess, Ky.	1	.3
Guilford, N. C.	1	.3
Hamilton, Tenn.	1	.2
Jefferson, Ala.	1	.2
Cambria, Pa.	1	.2
Montgomery, Pa.	1	.2
Armstrong, Pa.	1	.2
Jefferson, Pa.	1	.2
Carroll, Ohio	1	.2
Hocking, Ohio	1	.2
Keokuk, Iowa	1	.2
Crawford, Kan.	1	.2
Richland, S. C.	1	.2
Total Above Counties	39	7.4
Industry Total	66	9.9
% of U. S.	59.1	74.7
*3255—Clay Refractories		
Audrain, Mo.	6	2.4
Clearfield, Pa.	11	1.3
St. Louis City, Mo.	4	.9
Richmond, Ga.	1	.7
Columbia, Ohio	6	.6
Carter, Ky.	5	.5
Beaver, Pa.	4	.5
St. Louis, Mo.	1	.4
Tuscarawas, Ohio	7	.4
Jackson, Ohio	8	.4
Jefferson, Ala.	3	.4
Centre, Pa.	3	.3
Stark, Ohio	3	.3
Middlesex, N. J.	2	.3
Hancock, W. Va.	2	.3
Scioto, Ohio	3	.2
Cook, Ill.	2	.2
Washington, Pa.	1	.2
Boyd, Ky.	1	.2
Smith, Tex.	2	.2
Total Above Counties	75	10.7
Industry Total	177	13.3
% of U. S.	42.4	80.5
*3259—Structural Clay Products, N.E.C.		
Hocking, Ohio	1	.4
Perry, Ohio	3	.3
Clay, Ind.	1	.2
Hancock, Ohio	1	.2
Cook, Ill.	1	.2
Hamilton, Tenn.	1	.2
Tuscarawas, Ohio	2	.2
Montgomery, Kan.	2	.2
Breckinridge, Ky.	1	.2
Middlesex, N. J.	2	.2
Lawrence, Ohio	1	.2
Stokes, N. C.	1	.2
Kankakee, Ill.	3	.1
Total Above Counties	20	2.8
Industry Total	151	4.8
% of U. S.	13.2	58.3
*3261—Vitreous Plumbing Fixtures		
Mercer, N. J.	6	2.1
Middlesex, N. J.	5	.7
Armstrong, Pa.	1	.7
Howard, Ind.	2	.5
Crawford, Ill.	1	.4
Seneca, Ohio	1	.4
Lawrence, Pa.	1	.4
Sheboygan, Wis.	1	.4
Orleans, La.	1	.4
Los Angeles, Cal.	1	.3
San Bernardino, Cal.	2	.3
Ashland, Ohio	1	.2
Camden, N. J.	1	.2
Cook, Ill.	1	.2
Marion, W. Va.	1	.2
Etowah, Ala.	1	.2
Contra Costa, Cal.	1	.2
Hamilton, Ohio	1	.1
Medina, Tex.	1	.1
Muskingum, Ohio	1	.1
Total Above Counties	31	8.1
Industry Total	37	8.3
% of U. S.	83.8	97.6
*3262—Vitreous China Food Utensils		
Onondaga, N. Y.	3	1.5
Columbiana, Ohio	3	1.3
Lawrence, Pa.	1	1.1
Mercer, N. J.	2	.8
Jefferson, Pa.	1	.6
Los Angeles, Cal.	10	.5
Carroll, Ohio	1	.3
Beaver, Pa.	2	.3
Perry, Ohio	1	.3
Harrison, W. Va.	1	.2
Erie, N. Y.	1	.2
Atlantic, N. J.	1	.2
Contra Costa, Cal.	1	.1
Cuyahoga, Ohio	1	.1
Total Above Counties	29	7.5
Industry Total	34	8.3
% of U. S.	85.3	90.4
*3263—Earthenware Food Utensils		
Hancock, W. Va.	4	2.8
Los Angeles, Cal.	16	1.0
Mahoning, Ohio	3	.8
Harrison, Ohio	1	.6
Guernsey, Ohio	1	.5
Columbia, Ohio	2	.5
Logan, Ill.	1	.5
Macomb, Mich.	1	.5
Unicoi, Tenn.	1	.5
Washington, Pa.	2	.4
Jefferson, Ohio	1	.3
Goodhue, Minn.	1	.3
Tyler, W. Va.	1	.3
Mercer, N. J.	1	.2
Vanderburgh, Ind.	1	.2
Coshocton, Ohio	1	.1
York, Pa.	1	.1
Total Above Counties	39	9.8
Industry Total	47	9.8
% of U. S.	83.0	100.0
*3264—Porcelain Electrical Supplies		
Hamilton, Tenn.	2	1.3
Wayne, Mich.	1	1.0
Summit, Ohio	2	.8
Westmoreland, Pa.	2	.7
Genesee, N. Y.	1	.7
Baltimore City, Md.	1	.7
Mercer, N. J.	5	.6
Knox, Tenn.	1	.4
Dane, Wis.	1	.4
McDonough, Ill.	1	.4
Middlesex, N. J.	2	.4
Wood, W. Va.	1	.2
Hunterdon, N. J.	1	.2
Livingston, N. Y.	1	.2
Erie, Ohio	1	.2
Schenectady, N. Y.	2	.2
Hartford, Conn.	1	.2
Ontario, N. Y.	1	.2
Butler, Pa.	1	.2
Columbia, Ohio	3	.2
Total Above Counties	31	9.2
Industry Total	45	9.2
% of U. S.	68.9	100.0
*3265—China Decorating for the Trade		
Allegheny, Pa.	1	.2
Total Above Counties	1	.2
Industry Total	50	.5
% of U. S.	2	40.0
*3269—Pottery Products, N.E.C.		
Los Angeles, Cal.	206	2.1
Muskingum, Ohio	17	.7
Perry, Ohio	7	.5
McDonough, Ill.	2	.5
Mercer, N. J.	8	.4
Jefferson, Col.	2	.4
Mahoning, Ohio	7	.3
Orange, Cal.	38	.3
Butler, Pa.	1	.2
Columbia, Ohio	13	.2
Warren, Ill.	1	.2
Kane, Ill.	2	.2
Summit, Ohio	3	.2
Graves, Ky.	2	.2
Cook, Ill.	9	.2
Tazewell, Ill.	2	.1
Beaver, Pa.	2	.1
Total Above Counties	322	6.8
Industry Total	654	7.8
% of U. S.	49.2	87.2
*3271—Concrete Products		
Los Angeles, Cal.	85	2.1
Dade, Fla.	62	1.4
Wayne, Mich.	49	1.2
Cook, Ill.	81	.9
Dallas, Tex.	21	.8
Lake, Ind.	16	.8
Bergen, N. J.	15	.8
Harris, Tex.	36	.7
Milwaukee, Wis.	35	.7
King, Wash.	31	.5
Franklin, Ohio	25	.5
Hillsborough, Fla.	16	.5
Maricopa, Ariz.	15	.5
Broward, Fla.	23	.4
Hennepin, Minn.	24	.4
Allegheny, Pa.	35	.4
Queens, N. Y.	21	.4
Montgomery, Ohio	15	.4
Fulton, Ga.	20	.4
Orleans, La.	9	.3
Total Above Counties	617	14.1
Industry Total	5,090	73.4
% of U. S.	12.1	19.2
*3272—Gypsum Products		
Erie, N. Y.	3	1.5
Webster, Iowa	4	1.2
Genesee, N. Y.	2	1.0
Ottawa, Ohio	2	.5
Washington, Va.	1	.4
Richmond, N. Y.	2	.4
Imperial, Cal.	1	.4
Clark, Nev.	1	.4
Blaine, Okla.	1	.4
Iosco, Mich.	1	.4
Lake, Ind.	1	.4
Kent, Mich.	3	.4
Los Angeles, Cal.	7	.4
Nolan, Tex.	2	.4
Chatham, Ga.	1	.3
Fisher, Tex.	2	.3
Philadelphia, Pa.	1	.3
Bronx, N. Y.	2	.2
Rockingham, N. H.	1	.2
Suffolk, Mass.	1	.2
Total Above Counties	39	9.7
Industry Total	89	11.5
% of U. S.	43.8	84.3
*3274—Lime		
Sandusky, Ohio	6	1.2
Centre, Pa.	3	.8
Ste. Genevieve, Mo.	1	.7
Wythe, Va.	1	.6
Shelby, Ala.	1	.5
Ottawa, Ohio	2	.5
Seneca, Ohio	1	.4
Lebanon, Pa.	2	.4
Cook, Ill.	4	.3
Berkshire, Mass.	5	.3
Chester, Pa.	1	.2
York, Pa.	2	.2
Independence, Ark.	1	.2
Comal, Tex.	1	.2
Greene, Mo.	2	.2
Giles, Va.	3	.2
Monterey, Cal.	1	.2
Travis, Tex.	1	.2
St. Francois, Mo.	1	.2
Clark, Ohio	2	.1
Total Above Counties	45	7.6
Industry Total	145	8.3
% of U. S.	31.0	91.6
*3275—Mineral Wool		
Licking, Ohio	1	3.3
Wyandotte, Kan.	4	1.7
Madison, Ind.	2	.6
Los Angeles, Cal.	5	.6
Wayne, Ind.	1	.5
Wabash, Ind.	4	.5
Santa Clara, Cal.	1	.5
Shelby, Ind.	2	.5
Morris, N. J.	2	.3
Middlesex, N. J.	1	.2
Maury, Tenn.	1	.2
Jasper, Mo.	1	.2
Defiance, Ohio	1	.2
Mercer, N. J.	1	.2
Ottawa, Ohio	1	.2
Jefferson, Ala.	3	.1
Erie, N. Y.	2	.1
Total Above Counties	33	9.9
Industry Total	85	11.5
% of U. S.	38.8	86.1
*3281—Cut-Stone and Stone Products		
Washington, Vt.	92	1.5
Rutland, Vt.	22	1.4
Monroe, Ind.	24	1.4
Lawrence, Ind.	8	1.1
Elbert, Ga.	39	.9
Knox, Tenn.	8	.8
Middlesex, Mass.	7	.8
Cook, Ill.	30	.8
Stearns, Minn.	16	.8
Northampton, Pa.	16	.6
Pickens, Ga.	5	.5
Montgomery, Pa.	3	.4
Hudsen, N. J.	5	.4
Jasper, Md.	2	.4
Surry, N. C.	2	.4
Scioto, Ohio	2	.3
Talladega, Ala.	3	.3
Franklin, Ala.	2	.2
Lowndes, Miss.	1	.2
Buckingham, Va.	3	.2
Total Above Counties	290	13.2
Industry Total	977	20.4
% of U. S.	29.7	64.7
*3291—Abrasive Products		
Niagara, N. Y.	5	5.0
Worcester, Mass.	6	4.6
Cook, Ill.	37	1.5
Albany, N. Y.	1	1.1
Philadelphia, Pa.	6	1.0
Kings, N. Y.	12	.8
Wayne, Mich.	13	.6
Stark, Ohio	1	.5
Los Angeles, Cal.	19	.4
Seneca, Ohio	1	.4
St. Louis City, Mo.	2	.4
Passaic, N. J.	8	.4
Barron, Wis.	1	.4
Jackson, Mich.	3	.4
Chester, Pa.	1	.4

* Old SIC Code.

©SM, 1959.

Manufacture of Stone, Clay & Glass Products—SIC 32—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 32 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Hampden, Mass.	10	.4
Shiawassee, Mich.	1	.4
Fairfield, Conn.	3	.3
Plymouth, Mass.	4	.3
Cuyahoga, Ohio	13	.3
Total Above Counties	147	19.6
Industry Total	388	22.8
% of U. S.	47.7	86.7
*3292—Asbestos Products		
Somerset, N. J.	4	3.0
Lake, Ill.	3	2.7
Fairfield, Conn.	1	1.2
Lancaster, Pa.	1	1.1
Los Angeles, Cal.	8	1.0
Montgomery, Pa.	5	.8
Cook, Ill.	5	.8
Mercer, N. J.	1	.7
Kings, N. Y.	2	.7
Jefferson, La.	2	.7
Charleston, S. C.	1	.7
St. Louis City, Mo.	4	.7
Mecklenburg, N. C.	3	.6
Natchez, Miss.	1	.5
Wayne, Mich.	1	.4
Henry, Ind.	1	.4
San Joaquin, Cal.	1	.4
Passaic, N. J.	4	.4
Albany, N. Y.	2	.4
St. Louis, Mo.	3	.4
Total Above Counties	53	17.6
Industry Total	110	22.9
% of U. S.	48.2	76.9
*3293—Gaskets and Asbestos Insulations		
Cook, Ill.	37	3.8
Wayne, Mich.	14	1.3
Montgomery, Pa.	6	1.0
Hudson, N. J.	2	.7
Litchfield, Conn.	1	.4
Norfolk, Va.	1	.4
St. Clair, Mich.	1	.4
Los Angeles, Cal.	13	.4
Philadelphia, Pa.	9	.4
Alameda, Cal.	1	.2
La Porte, Ind.	1	.2
Livingston, Mich.	1	.2
McLean, Ill.	1	.2
Middlesex, N. J.	4	.2
Camden, N. J.	3	.2
Worcester, Mass.	1	.2
Franklin, Ind.	1	.2
Suffolk, Mass.	3	.2
Cuyahoga, Ohio	6	.1
Harris, Tex.	6	.1
Total Above Counties	113	10.8
Industry Total	238	13.5
% of U. S.	47.5	80.0
*3295—Minerals, Ground or Treated		
Los Angeles, Cal.	17	.5
Jefferson, Ala.	11	.4
Marathon, Wis.	1	.4
Erie, N. Y.	7	.3
Salt Lake, Utah	3	.2
Harris, Tex.	6	.2
Iosco, Mich.	1	.2
New Castle, Del.	2	.2
Hinds, Miss.	1	.2
Pulaski, Ark.	1	.2
Lake, Ind.	7	.2
Somerset, N. J.	2	.2
Allegheny, Pa.	8	.2
Cuyahoga, Ohio	4	.2
Cook, Ill.	12	.2
Will, Ill.	1	.2
Baltimore, Md.	2	.1
Total Above Counties	86	4.1
Industry Total	353	8.1
% of U. S.	24.4	50.6
*3297—Nonclay Refractories		
Baltimore City, Md.	2	1.1
Huntingdon, Pa.	3	.8
Blair, Pa.	2	.6
Will, Ill.	2	.5
Middlesex, N. J.	2	.4
Montgomery, Pa.	3	.4
Lake, Ind.	1	.4
Jefferson, Ky.	1	.4
Philadelphia, Pa.	4	.4
Monterey, Cal.	2	.3
Westmoreland, Pa.	1	.2
Erie, N. Y.	2	.2
Cape May, N. J.	1	.2
Allegheny, Pa.	3	.2
Greenup, Ky.	1	.2
Jefferson, Ala.	1	.2
Nye, Nev.	2	.2
Hudson, N. J.	1	.2
Centre, Pa.	2	.2
Trumbull, Ohio	2	.2
Total Above Counties	38	7.3
Industry Total	79	9.3
% of U. S.	48.1	78.5
*3298—Statuary and Art Goods		
Cook, Ill.	29	.4
Milwaukee, Wis.	6	.2
Philadelphia, Pa.	8	.1
New York, N. Y.	15	.1
Kings, N. Y.	14	.1
Suffolk, Mass.	8	.1
Total Above Counties	80	1.0
Industry Total	216	2.2
% of U. S.	37.0	45.5
*3299—Non-Metallic Mineral Products, N.E.C.		
Schenectady, N. Y.	2	.9
Rockingham, N. H.	1	.4
Porter, Ind.	1	.4
Newport News, Va.	2	.4
Westmoreland, Pa.	1	.2
Passaic, N. J.	2	.2
Middlesex, Mass.	4	.2
Avery, N. C.	1	.2
Queens, N. Y.	1	.2
Cuyahoga, Ohio	3	.1
Mitchell, N. C.	3	.1
Essex, N. J.	4	.1
Total Above Counties	25	3.4
Industry Total	121	4.2
% of U. S.	20.7	61.0

Manufacture of Primary Metals—SIC 33

Selling to SIC 33 . . .

By R. C. MOFFITT,

Vice President, Purchases, United States Steel Corp.

The large and varied purchase requirements of the primary metals industries offer exceptional opportunities for effective selling.

Gone are the days when a salesman could be of service if his approach to our requirements was haphazard, or motivated by mere expediency.

The day of the price buyer is also past. Today's buyer is a part of the company's management team. He is concerned with quality controls in suppliers' plants, with such things as inventory-control techniques and price trends, and he wants supplier suggestions for better methods. All aspects of quality, price, service, and delivery have become important, for today's buyer bases his awards on the value to his company of each purchase.

To sell successfully to the industry, a salesman needs to know many things: the products he is selling, how they compare with new and competitive products, changes in the technology and purchase-requirements of the metals industries, and changes in the factors underlying the long-term availability and prices of products offered. Just as the buyer's responsibilities and interests have grown, so also must the value of the salesman's products and information increase.

Taking the order is not enough. The effective representative must be responsible for effective delivery performance and satisfactory demonstration of value in the product application. The sales representative and the branch-office manager must appreciate that they speak for their company and not just for the local office. Accordingly, they should be equipped with appropriate authority and must assume the responsibility involved in dealing with multi-plant customers.

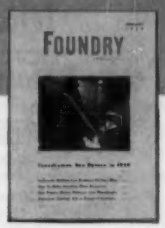
SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 33

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*3311—Blast Furnaces		
Allegheny, Pa.	7	5.2
Lake, Ind.	3	3.8
Jefferson, Ala.	6	3.8
Cook, Ill.	5	2.8
Mahoning, Ohio	6	2.1
Erie, N. Y.	3	1.8
Beaver, Pa.	2	1.6
Baltimore, Md.	1	1.5
Wayne, Mich.	3	1.4

* Old SIC Code.

©SM, 1959.

YOU CAN REACH KEY BUYING INFLUENCES IN ALL METAL CASTING INDUSTRIES WITH



CASTING METHODS

	PLANTS	COPIES
• SAND CASTING . . .	5,104	12,299
• DIE CASTING	1,161	1,738
• PERMANENT MOLD .	821	1,848
• CENTRIFUGAL	252	941
• PLASTER MOLD . . .	230	510
• INVESTMENT MOLD .	162	444
• SHELL MOLD	638	2,568

(FOUNDRY's total qualified distribution is 18,142 copies)

Through FOUNDRY your product story reaches over 75,000 key buying influences at executive, engineering, production, and purchasing levels in every worthwhile foundry . . . the foundries accounting for 98% of industry's melting capacity.

5 AIDS FOR SELLING TO THE METAL CASTING MARKET

1. **ANALYZE THE MARKET** with Penton's Foundry List (nominal charge). Tells where every foundry is located . . . helps you know who and where to sell.
2. **EVALUATE SALES PERFORMANCE AND POTENTIALS** with a Foundry Industry Marketing Guide. Identifies the 96 primary trading areas ranked by productive capacity.
3. **MAKE YOUR DISTRIBUTION MORE EFFECTIVE** with a list of supply houses and agents. Gives locations and information on more than 800 organizations.
4. **AN UP-TO-DATE PROSPECT LIST** with Sales Control Cards (nominal charge) that are tailor-made to your sales requirements . . . gives salesmen "blue-ribbon" leads.
5. **PROMOTION AND MERCHANDISING PROGRAMS** that stimulate salesmen and give backing to your advertising. These include a sales-supporting newsletter, advertising and editorial reprint services, plus merchandising letters.

Ask your FOUNDRY representative for complete details.

FOUNDRY a Penton publication

PENTON BUILDING CLEVELAND 13, OHIO

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 33 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Cuyahoga, Ohio	3	1.4
Lorain, Ohio	1	1.1
Utah, Utah	2	.8
Cambria, Pa.	1	.7
Northampton, Pa.	1	.7
Jefferson, Ohio	1	.7
St. Louis, Minn.	2	.5
Hancock, W. Va.	1	.4
Pueblo, Col.	1	.4
Madison, Ill.	1	.4
Dauphin, Pa.	1	.4
Total Above Counties	51	31.5
Industry Total	85	34.4
% of U. S.	60.0	91.6

***3312—Steel Works and Rolling Mills**

Allegheny, Pa.	19	53.2
Lake, Ind.	5	47.3
Mahoning, Ohio	6	22.8
Beaver, Pa.	8	21.8
Cook, Ill.	8	21.3
Baltimore City, Md.	2	20.4
Erie, N. Y.	5	18.4
Northampton, Pa.	1	17.5
Hancock, W. Va.	1	17.5
Wayne, Mich.	6	16.4
Jefferson, Ala.	7	16.4
Cambria, Pa.	1	13.5
Trumbull, Ohio	7	11.9
Cuyahoga, Ohio	5	11.9
Westmoreland, Pa.	9	11.1
Stark, Ohio	5	11.0
Jefferson, Ohio	3	9.1
Lorain, Ohio	1	8.9
Butler, Ohio	1	7.9
Madison, Ill.	3	7.5
Total Above Counties	101	365.8
Industry Total	294	478.0
% of U. S.	49.5	76.5

***3313—Electrometallurgical Products**

Niagara, N. Y.	3	2.9
Fayette, W. Va.	1	1.7
Washington, Ohio	1	1.4
Lee, Iowa	1	.7
Ashtabula, Ohio	1	.7
Mason, W. Va.	1	.4
Muskingum, Ohio	1	.4
Marshall, Ky.	1	.4
Hamilton, Tenn.	1	.4
Colbert, Ala.	1	.4
Jefferson, Ohio	1	.2
Skagit, Wash.	1	.2
Deer Lodge, Mont.	1	.2
Charleston, S. C.	1	.2
Clark, Nev.	1	.2
Douglas, Wash.	1	.2
Washington, Pa.	1	.2
Guernsey, Ohio	1	.2
Knox, Tenn.	1	.2
Cook, Ill.	2	.1
Total Above Counties	23	11.3
Industry Total	31	11.3
% of U. S.	74.2	100.0

***3321—Gray-Iron Foundries**

Wayne, Mich.	22	9.0
Cuyahoga, Ohio	25	6.9
Saginaw, Mich.	2	5.7
Jefferson, Ala.	19	4.7
Muskegon, Mich.	9	3.4
Cook, Ill.	47	3.3
Calhoun, Ala.	11	3.0
Milwaukee, Wis.	15	3.0
Los Angeles, Cal.	41	3.0
Hamilton, Tenn.	7	3.0
Defiance, Ohio	1	2.2
Burlington, N. J.	4	2.2
St. Louis City, Mo.	17	2.2
Tuscaloosa, Ala.	1	2.0
Montgomery, Ohio	11	1.9
Westmoreland, Pa.	14	1.8
Allegheny, Pa.	12	1.8
Marion, Ind.	8	1.8
Worcester, Mass.	14	1.8
Etowah, Ala.	6	1.4
Total Above Counties	286	83.7
Industry Total	1,414	124.1
% of U. S.	20.2	51.3

***3322—Malleable-Iron Foundries**

Vermilion, Ill.	2	2.5
Saginaw, Mich.	1	2.5
Cuyahoga, Ohio	2	1.3
Cook, Ill.	2	1.1
Milwaukee, Wis.	5	1.1
Campbell, Va.	1	1.1
Rock Island, Ill.	2	1.0
Franklin, Ohio	2	.9
Macon, Ill.	1	.7
Marion, Ind.	1	.7
Calhoun, Mich.	1	.7
Lawrence, Ohio	1	.7
Erie, N. Y.	3	.6
Vigo, Ind.	1	.5
New Haven, Conn.	3	.5
Chautauqua, N. Y.	1	.4
Berrien, Mich.	1	.4
Delaware, Ind.	1	.4
Northampton, Pa.	1	.4
Essex, N. J.	2	.4
Total Above Counties	34	17.9
Industry Total	81	21.3
% of U. S.	42.0	84.0

***3323—Steel Foundries**

Allegheny, Pa.	10	4.2
Cook, Ill.	13	3.6
Madison, Ill.	3	2.7
Lake, Ind.	3	2.7
Milwaukee, Wis.	8	2.1
Cambria, Pa.	1	2.1
Delaware, Pa.	7	2.0
Erie, N. Y.	6	1.9
Los Angeles, Cal.	14	1.5
Westmoreland, Pa.	3	1.4
Ohio, W. Va.	1	1.4
St. Louis City, Mo.	2	1.3
Stark, Ohio	2	1.1
Franklin, Ohio	2	1.1
Berrien, Mich.	2	1.1
Berks, Pa.	3	.9
Multnomah, Ore.	5	.9
Cuyahoga, Ohio	6	.8
Tulsa, Okla.	1	.7
Racine, Wis.	1	.7
Total Above Counties	93	34.2
Industry Total	239	51.0
% of U. S.	38.9	67.1

***3331—Primary Copper**

Middlesex, N. J.	4	4.0
Salt Lake, Utah	2	2.2
Pierce, Wash.	2	1.1
Queens, N. Y.	2	1.0
El Paso, Tex.	2	1.0
Gila, Ariz.	3	.7
Deer Lodge, Mon.	1	.7
Cochise, Ariz.	1	.7
Greenlee, Ariz.	1	.4
Cascade, Mont.	1	.4
Grant, N. M.	2	.4
White Pine, Nev.	1	.4
Pima, Ariz.	1	.2
Pinal, Ariz.	1	.2
Houghton, Mich.	2	.2
Total Above Counties	28	13.6
Industry Total	27	13.6
% of U. S.	98.3	100.0

***3332—Primary Lead**

Shoshone, Ida.	1	.5
El Paso, Tex.	1	.5
Contra Costa, Cal.	2	.4
Lewis and Clark, Mont.	1	.3
Jefferson, Mo.	1	.3
Douglas, Neb.	1	.3
Salt Lake, Utah	1	.3
Middlesex, N. J.	1	.1
Lake, Ind.	1	.1
Madison, Ill.	1	.1
Total Above Counties	11	2.9
Industry Total	13	2.9
% of U. S.	84.6	100.0

***3333—Primary Zinc**

Kay, Okla.	1	.8
Cascade, Mont.	1	.7
Washington, Okla.	1	.5
Deer Lodge, Mont.	1	.5
Nueces, Tex.	1	.5
Okmulgee, Okla.	1	.5
Beaver, Pa.	1	.5
Carbon, Pa.	1	.5
Washington, Pa.	1	.5
St. Clair, Ill.	2	.5
Potter, Tex.	1	.3
La Salle, Ill.	1	.3
Shoshone, Ida.	1	.3

* Old SIC Code.

©SM, 1959.

Manufacture of Primary Metals—SIC 33—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 33 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Moore, Tex.	1	.3
Bureau, Ill.	1	.3
Harrison, W. Va.	1	.3
Sebastian, Ark.	1	.1
Total Above Counties	18	7.4
Industry Total	21	7.4
% of U. S.	85.7	100.0
*3334—Primary Aluminum		
St. Bernard, La.	1	2.1
Blount, Tenn.	1	2.1
St. Lawrence, N. Y.	1	2.0
Calhoun, Tex.	1	1.6
Spokane, Wash.	1	1.6
Clark, Wash.	1	1.5
Hot Spring, Ark.	1	1.3
San Patricio, Tex.	1	1.2
Stanly, N. C.	1	1.1
Milam, Tex.	1	1.0
Cowlitz, Wash.	1	.8
Multnomah, Ore.	1	.8
Chelan, Wash.	1	.7
Colbert, Ala.	1	.7
Clark, Ark.	1	.7
Flathead, Mont.	1	.5
Pierce, Wash.	1	.4
Total Above Counties	17	20.1
Industry Total	17	20.1
% of U. S.	100.0	100.0
*3339—Primary Nonferrous Metals, N.E.C.		
Brazoria, Tex.	1	1.6
Baltimore City, Md.	1	.6
New Castle, Del.	1	.6
Clark, Nev.	1	.6
Galveston, Tex.	1	.6
Muscogee, Okla.	1	.4
Erie, N. Y.	2	.2
Adams, Col.	1	.2
Tooele, Utah	1	.2
Total Above Counties	10	5.0
Industry Total	28	5.1
% of U. S.	35.7	98.0
*3341—Secondary Nonferrous Metals		
Cook, Ill.	33	2.3
Cuyahoga, Ohio	18	1.0
Los Angeles, Cal.	20	.9
Middlesex, N. J.	4	.8
Richmond, N. Y.	1	.7
Lake, Ind.	6	.7
Philadelphia, Pa.	11	.6
Essex, N. J.	16	.6
Wayne, Mich.	9	.4
New Castle, Del.	1	.4
Fairfield, Conn.	5	.4
Kings, N. Y.	24	.3
Allegheny, Pa.	5	.3
Kane, Ill.	3	.2
Clinton, Ill.	1	.2
Lake, Ill.	1	.2
San Mateo, Cal.	3	.2
East Baton Rouge, La.	1	.2
Wyandotte, Kan.	1	.2
Erie, Pa.	4	.2
Total Above Counties	167	10.8
Industry Total	356	14.8
% of U. S.	46.9	73.0
*3351—Copper Rolling and Drawing		
New Haven, Conn.	15	10.4
Cuyahoga, Ohio	4	2.8
Oneida, N. Y.	3	2.6
Fairfield, Conn.	3	2.6
Wayne, Mich.	6	2.6
Union, N. J.	2	1.9
Madison, Ill.	1	1.6
Baltimore City, Md.	2	1.5
Erie, N. Y.	1	1.4
Cook, Ill.	2	1.4
Litchfield, Conn.	3	1.4
Kenosha, Wis.	1	1.3
Marion, Ind.	2	1.1
Providence, R. I.	3	1.0
Allen, Ind.	1	.9
Bristol, Mass.	4	.9
Allegheny, Pa.	3	.7
St. Clair, Mich.	1	.7
Morgan, Ala.	1	.7
Hartford, Conn.	1	.7
Total Above Counties	59	38.2
Industry Total	89	43.0
% of U. S.	66.3	88.8
*3352—Aluminum Rolling and Drawing		
Blount, Tenn.	1	5.3
St. Lawrence, N. Y.	1	3.2
Los Angeles, Cal.	10	3.2
Spokane, Wash.	2	3.0
Tippecanoe, Ind.	1	2.3
Cook, Ill.	3	2.2
Maricopa, Ariz.	1	2.1
Colbert, Ala.	1	2.1
Westmoreland, Pa.	1	2.1
Scott, Iowa	1	1.9
Licking, Ohio	1	1.8
Schuylkill, Pa.	1	1.6
Riverside, Cal.	2	1.2
Kent, Mich.	2	.7
Bergen, N. J.	2	.7
Jackson, W. Va.	1	.7
Mahoning, Ohio	6	.6
Coweta Ga.	1	.6
Baltimore City, Md.	1	.4
Marion, W. Va.	1	.4
Total Above Counties	42	36.1
Industry Total	94	37.9
% of U. S.	44.7	95.3
*3356—Rolling and Drawing, N.E.C.		
Cahill, W. Va.	1	2.2
Essex, N. J.	4	1.1
Madison, Ill.	2	.9
Cook, Ill.	7	.7
Hudson, N. J.	2	.7
Bradford, Pa.	1	.7
Wayne, Mich.	7	.5
Jefferson, Ohio	1	.5
Midland, Mich.	1	.4
La Salle, Ill.	2	.3
Kings, N. Y.	4	.3
Bristol, Mass.	2	.2
Providence, R. I.	5	.2
Androscoggin, Me.	1	.2
Auglaize, Ohio	1	.2
Beaver, Pa.	1	.2
Putnam, Ind.	1	.2
Middlesex, N. J.	1	.2
Carbon, Pa.	1	.2
Total Above Counties	45	9.9
Industry Total	98	10.3
% of U. S.	45.9	96.1
*3361—Nonferrous Foundries		
Cook, Ill.	116	5.8
Cuyahoga, Ohio	66	5.6
Los Angeles, Cal.	185	4.8
Howard, Ind.	7	3.1
Lucas, Ohio	9	2.9
Wayne, Mich.	84	2.5
Montgomery, Pa.	6	1.8
Allegheny, Pa.	17	1.6
Lawrence, Ind.	2	1.5
Fairfield, Conn.	20	1.5
Milwaukee, Wis.	28	1.4
Hamilton, Ohio	18	1.1
Onondaga, N. Y.	11	1.1
St. Louis City, Mo.	14	1.0
Erie, N. Y.	13	.9
Philadelphia, Pa.	30	.9
Essex, N. J.	22	.7
Kings, N. Y.	37	.7
Bay, Mich.	4	.7
New Haven, Conn.	23	.6
Total Above Counties	692	40.2
Industry Total	1,918	54.4
% of U. S.	36.1	73.9
*3391—Iron and Steel Forgings		
Milwaukee, Wis.	6	5.1
Cook, Ill.	22	4.9
Stark, Ohio	6	3.5
Allegheny, Pa.	8	3.0
Cuyahoga, Ohio	16	2.8
Erie, N. Y.	6	2.1
Wayne, Mich.	16	2.0
Philadelphia, Pa.	4	1.9
Ingham, Mich.	5	1.7
Worcester, Mass.	2	1.5
Lake, Ind.	2	.9
Hampden, Mass.	3	.9
Contra Costa, Cal.	1	.8
Sandusky, Ohio	2	.7
Hartford, Conn.	6	.6
Fairfield, Conn.	7	.5
Los Angeles, Cal.	11	.5
Winnebago, Ill.	2	.4
Camden, N. J.	1	.4
Delaware, Ind.	1	.4
Total Above Counties	127	34.6
Industry Total	280	39.2
% of U. S.	45.8	88.3
*3392—Wire Drawing		
Trumbull, Ohio	1	5.5
Providence, R. I.	5	3.0
Howard, Ind.	1	2.8
Westchester, N. Y.	4	2.8
Lake, Ill.	1	2.6
Worcester, Mass.	11	2.5
Oneida, N. Y.	4	2.2
New Haven, Conn.	5	2.2
Mercer, N. J.	4	1.9
Allen, Ind.	3	1.8
Cook, Ill.	16	1.8
Baltimore City, Md.	1	1.7
Cuyahoga, Ohio	5	1.7
Erie, N. Y.	2	1.6
Grant, Ind.	2	1.5
Fairfield, Conn.	7	1.4
Passaic, N. J.	6	1.2
Bristol, R. I.	1	1.1
Hampden, Mass.	4	1.1
Lycoming, Pa.	2	1.0
Total Above Counties	88	41.4
Industry Total	198	59.0
% of U. S.	44.4	70.2
*3393—Welded and Heavy—Riveted Pipe		
Allegheny, Pa.	4	2.5
Beaver, Pa.	2	1.9
Trumbull, Ohio	3	1.8
Wayne, Mich.	2	1.7
Orange, Tex.	1	1.5
Milwaukee, Wis.	2	1.4
Montgomery, Pa.	4	1.1
Mercer, Pa.	5	.9
Cuyahoga, Ohio	2	.9
Lake, Ind.	1	.7
Napa, Cal.	1	.7
Oakland, Mich.	5	.7
Stark, Ohio	1	.7
Cook, Ill.	4	.6
Alameda, Cal.	3	.5
Lorain, Ohio	1	.4
Schuylkill, Pa.	1	.4
Kings, N. Y.	2	.4
Bergen, N. J.	1	.4
Mono, Cal.	1	.4
Total Above Counties	48	19.6
Industry Total	88	21.9
% of U. S.	2.3	89.5
*3399—Primary Metal Industries, N.E.C.		
Wayne, Mich.	53	1.9
Cuyahoga, Ohio	31	1.8
Cook, Ill.	28	1.8
Los Angeles, Cal.	61	1.4
Beaver, Pa.	6	1.2
New Haven, Conn.	12	.8
Worcester, Mass.	6	.8
Allegheny, Pa.	12	.8
Bergen, N. J.	3	.8
Oneida, N. Y.	2	.8
New York, N. Y.	6	.8
Lake, Ind.	5	.7
Stark, Ohio	1	.7
Mahoning, Ohio	4	.6
Erie, Pa.	6	.6
Philadelphia, Pa.	12	.6
Passaic, N. J.	5	.5
Hartford, Conn.	6	.5
Suffolk, Mass.	3	.3
Queens, N. Y.	12	.3
Total Above Counties	274	17.7
Industry Total	575	24.9
% of U. S.	47.7	71.1

* Old SIC Code.

©SM, 1959.

Manufacture of Fabricated Metals—SIC 34

Selling to SIC 34 . . .

By J. W. RUFF,

Purchasing Agent, American-Standard, Industrial Division

Our industry needs supplier salesmen who are technically competent in their own field and creative enough to assist us in applying their product to ours for maximum performance and quality with minimum end-product cost.

Let's take a foundry salesman for example. If he is able to meet the above criteria, he will not only be

completely familiar with his prospect's abilities and limitations, but will also be able and willing to make suggestions for changes in pattern and casting designs that will reduce finished-product cost.

There has been a marked improvement in salesmen's knowledge of their own products. Today at least 75% of the salesmen calling on us have sufficient product knowledge, but only 40% have a thorough understanding of our specific application of their product.

Our industry is always looking for materials that can be formed, joined, or finished at lower costs. We are interested in new machines and techniques that will give us lower-cost end products with present materials. New specialty hardware items and fasteners are being announced at a rapid rate in the trade papers, but there is a seeming lack of follow-through in the field by competent application engineers. The same situation exists with mechanical seals, gasket material and a long list of comparatively low-cost miscellaneous material.

Many industries in this general category can operate as assemblers with little investment in plant or special machinery. Each building boom encourages the establishment of new companies and the decentralization of older ones. The general trend today, however, is towards more widely scattered plants. This will require salesmen to travel more, to obtain maximum market-penetration. Time is an important factor in our industry. The successful salesman will always insist that his company maintain delivery schedules. He can perform an additional service by gearing his production to our requirements so that we may operate with minimum inventory and still be free of the majority of troublesome "stock-outs".

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 34

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
***3411—Tin Cans and Other Tinware**		
Cook, Ill.	22	11.9
Baltimore City, Md.	8	4.4
Los Angeles, Cal.	11	2.3
Philadelphia, Pa.	8	2.2
Hudson, N. J.	2	2.2
Kings, N. Y.	19	2.1
Alameda, Cal.	5	1.8
Allegheny, Pa.	2	1.3
Milwaukee, Wis.	2	1.3
St. Louis City, Mo.	2	1.3
San Francisco, Cal.	3	1.3
Harris, Tex.	3	1.3
Passaic, N. J.	4	1.1
Hillsborough, Fla.	2	1.1
Hamilton, Ohio	4	1.1
Monroe, N. Y.	2	.9
Queens, N. Y.	2	.9
Santa Clara, Cal.	2	.7
Union, N. J.	1	.7
Winnebago, Ill.	1	.7
Total Above Counties	102	40.6
Industry Total	227	53.8
% of U. S.	45.0	75.5
***3421—Cutlery**		
Suffolk, Mass.	1	2.0
Essex, N. J.	30	1.6
Kings, N. Y.	7	1.3
Fairfield, Conn.	8	1.1
Providence, R. I.	6	.9
Ontario, N. Y.	1	.8
Oneida, N. Y.	1	.6
Cattaraugus, N. Y.	7	.6
Hampshire, Mass.	3	.5
Sandusky, Ohio	7	.4
Hartford, Conn.	2	.3
Somerset, Md.	1	.4
Onondaga, N. Y.	2	.3
Somerset, N. J.	1	.3
New Haven, Conn.	8	.2
Erie, N. Y.	2	.2
Orange, N. Y.	1	.2
Wyoming, N. Y.	1	.2
Boulder, Col.	1	.2
Worcester, Mass.	1	.2
Total Above Counties	88	12.0
Industry Total	182	13.3
% of U. S.	48.4	90.2

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
***3422—EdgeTools**		
St. Louis City, Mo.	15	1.0
Kanawha, W. Va.	1	.6
Winnebago, Ill.	3	.3
Worcester, Mass.	7	.3
Hartford, Conn.	4	.3
Essex, Mass.	17	.3
Clinton, Ohio	2	.3
Cook, Ill.	12	.3
Jackson, Mo.	2	.3
New York, N. Y.	21	.3
King, Wash.	2	.2
St. Louis, Mo.	1	.2
Broome, N. Y.	4	.2
Middlesex, Mass.	7	.2
Suffolk, Mass.	3	.1
Middlesex, Conn.	2	.1
Los Angeles, Cal.	15	.1
Total Above Counties	118	5.1
Industry Total	247	6.3
% of U. S.	47.8	81.0
***3423—Hand Tools, N. E. C.**		
Cook, Ill.	31	1.9
Hartford, Conn.	9	1.4
Franklin, Mass.	5	1.2
Chautauqua, N. Y.	3	1.2
Wood, W. Va.	1	.7
Los Angeles, Cal.	41	.7
Berrien, Mich.	1	.7
Lorain, Ohio	2	.7
Essex, N. J.	13	.6
Philadelphia, Pa.	10	.6
Cuyahoga, Ohio	12	.5
Racine, Wis.	3	.4
Summit, Ohio	7	.4
Fairfield, Conn.	8	.4
Oneida, N. Y.	1	.4
Lehigh, Pa.	1	.4
Woodbury, Iowa	1	.4
St. Louis, Minn.	1	.4
Wabash, Ill.	1	.4
Hampden, Mass.	3	.4
Total Above Counties	154	13.8
Industry Total	502	20.7
% of U. S.	30.7	66.7

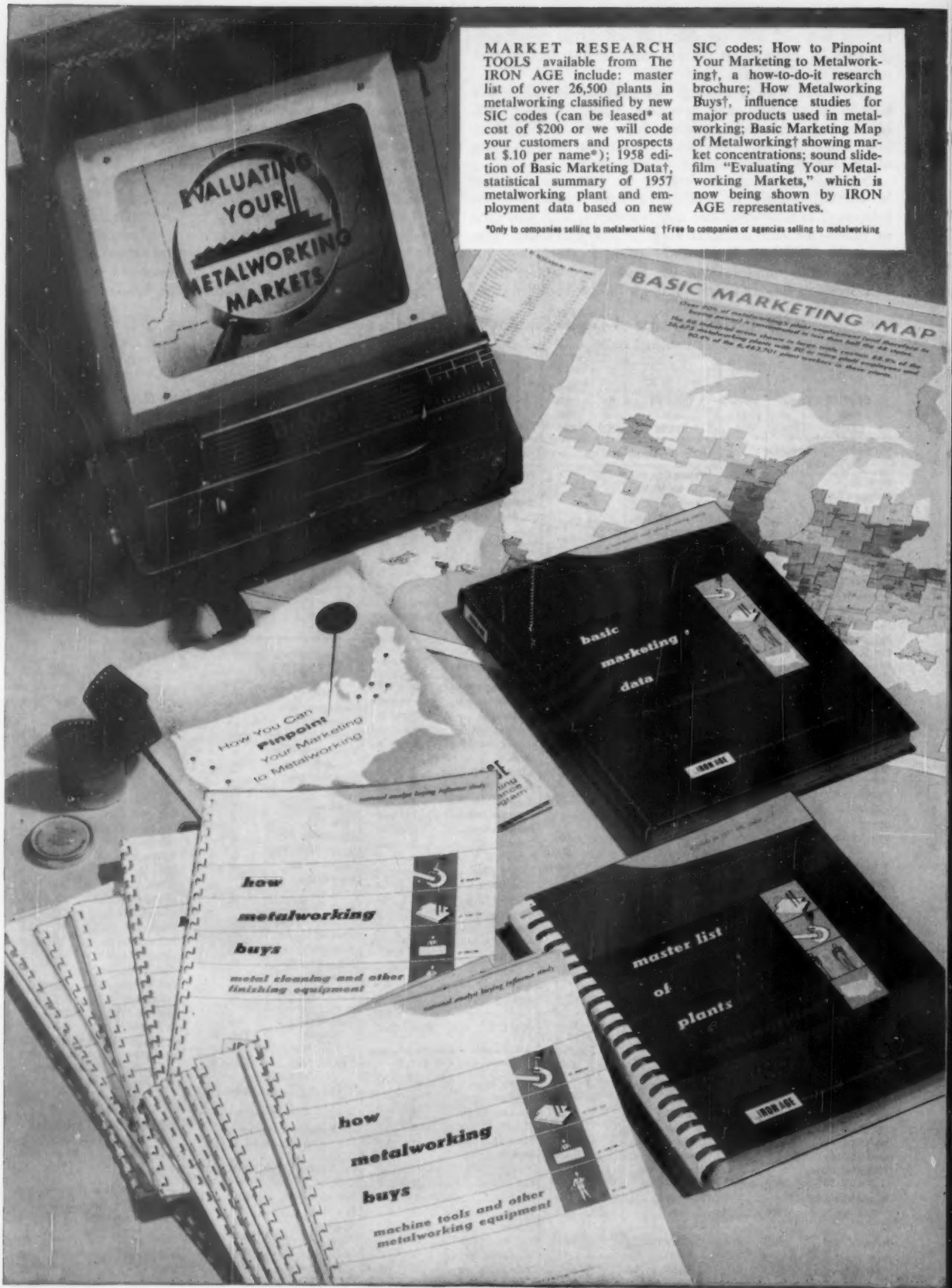
COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
***3424—Files**		
Providence, R. I.	1	.9
Tuscarawas, Ohio	1	.6
Philadelphia, Pa.	3	.5
Madison, Ind.	1	.3
Total Above Counties	6	2.3
Industry Total	29	2.7
% of U. S.	20.7	85.2
***3425—Hand Saws and Saw Blades**		
Worcester, Mass.	3	1.3
Philadelphia, Pa.	1	.9
Marion, Ind.	1	.6
Hartford, Conn.	1	.4
New Haven, Conn.	2	.4
Cook, Ill.	11	.3
Allegheny, Pa.	4	.3
Monroe, N. Y.	1	.2
St. Louis City, Mo.	1	.2
Hampden, Mass.	2	.2
Fairfield, Conn.	1	.2
Jefferson, Ky.	2	.2
Nassau, N. Y.	1	.2
Licking, Ohio	1	.2
Bronx, N. Y.	2	.1
Franklin, Ohio	5	.1
York, Pa.	2	.1
Cuyahoga, Ohio	3	.1
Total Above Counties	44	6.0
Industry Total	98	6.3
% of U. S.	44.9	95.2
***3429—Hardware, N. E. C.**		
Wayne, Mich.	23	8.1
Hartford, Conn.	6	6.3
Genesee, Mich.	1	5.0
Mercer, N. J.	5	4.7
Kent, Mich.	11	4.4
Winnebago, Ill.	7	4.0
Franklin, Ohio	1	3.5
Los Angeles, Cal.	85	3.2
Cook, Ill.	70	3.1
New Haven, Conn.	14	2.7
Fairfield, Conn.	16	2.7
Cuyahoga, Ohio	14	2.3
Milwaukee, Wis.	8	1.7
Philadelphia, Pa.	19	1.7

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
San Francisco, Cal.	6	1.4
Whiteside, Ill.	7	1.1
Queens, N. Y.	21	1.1
Kings, N. Y.	33	.8
Bergen, N. J.	2	.8
Roanoke, Va.	1	.7
Total Above Counties	350	59.3
Industry Total	868	78.3
% of U. S.	40.4	75.7
***3431—Plumbing Fixtures and Fittings**		
Jefferson, Ky.	2	4.3
Sheboygan, Wis.	1	2.4
Hamilton, Tenn.	3	2.3
Los Angeles, Cal.	36	2.3
New Haven, Conn.	6	2.0
Trumbull, Ohio	2	1.7
Baltimore City, Md.	3	1.4
Hamilton, Ohio	3	1.3
Cook, Ill.	29	1.0
Columbiana, Ohio	1	.8
Contra Costa, Cal.	2	.8
Wayne, Mich.	4	.8
Monongalia, W. Va.	2	.8
Kent, Mich.	3	.7
Cuyahoga, Ohio	25	.7
Knox, Ill.	1	.5
Kings, N. Y.	14	.4
Milwaukee, Wis.	5	.4
Clinton, Ind.	2	.4
Hartford, Conn.	3	.3
Total Above Counties	144	25.3
Industry Total	323	29.1
% of U. S.	44.8	86.9
***3439—Heating and Cooking Equipment, N. E. C.**		
Los Angeles, Cal.	69	4.0
Cook, Ill.	41	3.0
Cuyahoga, Ohio	28	2.5
Erie, N. Y.	13	2.2
Sedgwick, Kan.	6	2.0
Franklin, Ohio	9	1.9
St. Louis City, Mo.	12	1.6
Bradley, Tenn.	3	1.6

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Kankakee, Ill.	2	1.5
Philadelphia, Pa.	9	1.4
Hudson, N. J.	8	1.4
Hamilton, Ohio	5	1.3
Winnebago, Ill.	2	1.3
Wayne, Mich.	18	1.2
Milwaukee, Wis.	9	1.2
Richland, Ohio	1	1.0
Berks, Pa.	3	1.0
Montgomery, Pa.	5	.9
Queens, N. Y.	18	.9
Marshall, Tenn.	1	.9
Total Above Counties	280	32.7
Industry Total	866	64.1
% of U. S.	29.3	51.0
***3441—Structural and Ornamental Work**		
Allegheny, Pa.	55	6.0
Cook, Ill.	134	5.0
Beaver, Pa.	8	5.0
Los Angeles, Cal.	125	4.7
Jefferson, Ala.	34	3.3
Wayne, Mich.	54	3.2
Lake, Ind.	12	2.8
Harris, Tex.	36	2.7
Montgomery, Pa.	17	2.5
Alameda, Cal.	35	2.4
Kings, N. Y.	87	2.3
Philadelphia, Pa.	70	1.8
Cuyahoga, Ohio	44	1.8
Multnomah, Ore.	24	1.8
Erie, N. Y.	23	1.7
Lehigh, Pa.	11	1.7
Macomb, Mich.	8	1.7
Queens, N. Y.	57	1.7
Oklahoma, Okla.	10	1.6
Stark, Ohio	8	1.3
Total Above Counties	857	53.4
Industry Total	2,914	133.0
% of U. S.	29.4	40.2
***3442—Metal Doors, Sash, and Trim**		
Wayne, Mich.	45	3.2
Nassau, N. Y.	41	3.2
Cook, Ill.	61	2.6

* Old SIC Code.

©SM, 1959.



MARKET RESEARCH TOOLS available from The IRON AGE include: master list of over 26,500 plants in metalworking classified by new SIC codes (can be leased* at cost of $200 or we will code your customers and prospects at $.10 per name*); 1958 edition of Basic Marketing Data†, statistical summary of 1957 metalworking plant and employment data based on new SIC codes; How to Pinpoint Your Marketing to Metalworking†, a how-to-do-it research brochure; How Metalworking Buys†, influence studies for major products used in metalworking; Basic Marketing Map of Metalworking† showing market concentrations; sound slidefilm "Evaluating Your Metalworking Markets," which is now being shown by IRON AGE representatives.

*Only to companies selling to metalworking †Free to companies or agencies selling to metalworking



How to Get More for Your Marketing Dollar in Metalworking

New IRON AGE Marketing Assistance Program Helps You Identify and Locate the Most Profitable Markets for Your Products

If you sell to metalworking, The IRON AGE Marketing Assistance Program can help streamline your marketing setup to meet today's intensified competition.

This program makes available research tools for carrying out four key steps to improved marketing. First, it provides a master list of metalworking plants, or an IRON AGE SIC coding service for classifying your customers and prospects by the new SIC codes, thus identifying the industries that make up your metalworking markets. Second, it provides statistical data for evaluating the sales potential of these industries for your product. Third, it summarizes metalworking plant and employment data, so you can pinpoint your major sales targets nationally, by states, and by convenient industrial areas within states. Fourth, it provides information that can increase sales efficiency by identifying the buying-influence executives you must *sell* by industry, plant size, title and function.

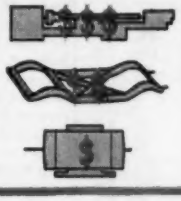
In short, using the tools of The IRON AGE Marketing Assistance Program, you can identify your markets more accurately, make sales planning more effective, and increase sales efficiency. The result is that you get more for your marketing dollar in metalworking.

Your IRON AGE representative has complete details on these research tools . . . and the basis on which they are available. He can also show you a new IA sound slidefilm, "Evaluating Your Metalworking Markets."

How to Get More for Your Marketing Dollar in Metalworking



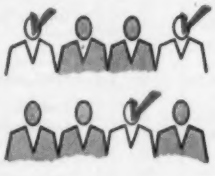
1. Identify the industries that make up your markets



2. Evaluate market potential of each industry



3. Gear sales efforts to market potential



4. Increase sales efficiency by preselling buying-specifying team

The **IRON AGE**

A Chilton Publication

Chestnut & 56th Sts., Philadelphia 39, Pa.



Manufacture of Fabricated Metals—SIC 34—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 34 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Mahoning, Ohio	17	2.3
Philadelphia, Pa.	25	2.0
Dade, Fla.	32	1.8
Kings, N. Y.	41	1.4
Bronx, N. Y.	28	1.3
Los Angeles, Cal.	61	1.1
St. Louis, Mo.	6	.8
Elkhart, Ind.	7	.8
Berrien, Mich.	3	.8
Allegan, Mich.	1	.7
Schuylkill, Pa.	1	.7
St. Louis City, Mo.	15	.6
Oakland, Mich.	18	.6
Queens, N. Y.	26	.6
King, Wash.	13	.6
Cuyahoga, Ohio	12	.5
Onondaga, N. Y.	8	.5
Total Above Counties	461	25.9
Industry Total	1,096	46.4
% of U. S.	42.0	56.0

*3443—Boiler Shop Products

Los Angeles, Cal.	58	6.5
Summit, Ohio	5	5.4
Hamilton, Tenn.	5	4.7
Milwaukee, Wis.	15	3.4
Cook, Ill.	39	2.6
Allegheny, Pa.	11	2.4
Lake, Ind.	5	2.2
Tulsa, Okla.	10	2.2
Chautauqua, N. Y.	2	2.0
Harris, Tex.	18	1.7
Chester, Pa.	7	1.6
St. Louis City, Mo.	19	1.6
Jefferson, Ala.	9	1.2
Multnomah, Ore.	7	1.2
Caddo, La.	3	1.1
Erie, Pa.	5	1.1
Wayne, Mich.	24	1.1
Oklahoma, Okla.	6	1.0
Cumberland, Me.	2	1.0
Montgomery, Pa.	14	1.0
Total Above Counties	264	45.0
Industry Total	977	79.8
% of U. S.	27.0	56.4

*3444—Sheet Metal Work

Los Angeles, Cal.	179	2.8
Cook, Ill.	102	2.7
Philadelphia, Pa.	80	2.7
Kings, N. Y.	62	1.7
Jackson, Mo.	20	1.5
Milwaukee, Wis.	17	1.5
Cuyahoga, Ohio	38	1.3
Hamilton, Ohio	28	1.1
Knox, Ill.	1	1.0
Wayne, Mich.	43	1.0
Essex, N. J.	36	.8
Allegheny, Pa.	17	.8
Queens, N. Y.	30	.7
Ashtabula, Ohio	2	.7
Beaver, Pa.	1	.7
Middlesex, Mass.	29	.7
Ohio, W. Va.	1	.6
Passaic, N. J.	22	.6
St. Louis City, Mo.	21	.6
New York, N. Y.	41	.5
Total Above Counties	773	24.0
Industry Total	2,425	53.6
% of U. S.	31.8	44.7

*3461—Vitreous-Enameled Product

Allegheny, Pa.	2	1.2
Columbiana, Ohio	1	1.0
Cuyahoga, Ohio	2	.4
Kanawha, W. Va.	2	.4
Harrison, Ky.	1	.4
Bradley, Tenn.	1	.4
Orleans, La.	1	.4
Beaver, Pa.	1	.4
Fayette, Ind.	1	.3
Marshall, W. Va.	1	.3
Coshocton, Ohio	1	.3
Erie, Pa.	2	.2
Ottawa, Mich.	1	.2
Middlesex, Mass.	2	.2
Jefferson, Ky.	1	.2
Belmont, Ohio	1	.2
Elkhart, Ind.	1	.2
Allen, Ohio	1	.2
Queens, N. Y.	1	.2
Bristol, Mass.	2	.1
Total Above Counties	28	7.2
Industry Total	51	7.3
% of U. S.	51.0	98.6

*3463—Metal Stampings

Cook, Ill.	286	14.0
Wayne, Mich.	114	7.0
Cuyahoga, Ohio	79	4.0
Los Angeles, Cal.	162	3.4
Baltimore City Md.	9	3.3
Manitowoc, Wis.	6	3.3
Lucas, Ohio	28	2.7
Hamilton, Ohio	27	2.7
Oneida, N. Y.	9	2.5
Oakland, Mich.	43	2.4
New Haven, Conn.	37	2.2
Kings, N. Y.	77	2.0
Jefferson, Ky.	6	2.0
Westmoreland, Pa.	2	1.8
Belmont, Ohio	1	1.7
Washington, Wis.	5	1.6
Milwaukee, Wis.	37	1.6
Queens, N. Y.	45	1.6
Philadelphia, Pa.	38	1.3
Macomb, Mich.	39	1.2
Total Above Counties	1,031	62.3
Industry Total	2,269	125.9
% of U. S.	45.4	49.4

*3465—Enameling and Lacquering

Cook, Ill.	49	1.2
Los Angeles, Cal.	40	.6
Wayne, Mich.	16	.5
Kings, N. Y.	18	.3
New York, N. Y.	26	.3
St. Louis City, Mo.	6	.2
Providence, R. I.	29	.2
Cuyahoga, Ohio	14	.2
Tuscarawas, Ohio	1	.2
Essex, N. J.	10	.1
Kent, Mich.	4	.1
Total Above Counties	213	3.9
Industry Total	380	6.2
% of U. S.	56.1	62.9

*3466—Galvanizing

Ontario, N. Y.	1	.4
Philadelphia, Pa.	7	.4
Cook, Ill.	13	.3
Allegheny, Pa.	2	.2
Barron, Wis.	1	.2
Baltimore City Md.	2	.2
Hudson, N. J.	4	.2
Los Angeles, Cal.	9	.2
Middlesex, Mass.	5	.1
Essex, N. J.	3	.1
Kings, N. Y.	4	.1
Total Above Counties	51	2.4
Industry Total	136	3.1
% of U. S.	37.5	77.4

*3467—Engraving on Metal

Cook, Ill.	25	.7
Queens, N. Y.	5	.5
Los Angeles, Cal.	26	.5
New York, N. Y.	47	.4
Bergen, N. J.	3	.2
Marion, Ind.	1	.2
Hampden, Mass.	5	.2
Hartford, Conn.	4	.1
Essex, N. J.	11	.1
Total Above Counties	127	2.9
Industry Total	269	4.0
% of U. S.	47.2	72.5

*3468—Plating and Polishing

Cook, Ill.	221	4.4
Los Angeles, Cal.	266	3.7
New York, N. Y.	180	2.0
Wayne, Mich.	94	1.6
Shelby, Ohio	3	1.4
Cuyahoga, Ohio	86	1.3
Providence, R. I.	87	1.2
Kings, N. Y.	75	1.2
Essex, N. J.	50	1.1
Lenawee, Mich.	3	.8
Queens, N. Y.	37	.7
Fairfield, Conn.	28	.6
Philadelphia, Pa.	35	.6
Marion, Ind.	22	.5
Milwaukee, Wis.	28	.5
Suffolk, Mass.	20	.4
New Haven, Conn.	23	.4
Hamilton, Ohio	22	.4
Lucas, Ohio	19	.4
Bristol, Mass.	24	.4
Total Above Counties	1,323	23.6
Industry Total	2,446	37.1
% of U. S.	54.1	63.6

*3471—Lighting Fixtures

Cook, Ill.	148	5.8
Madison, Ind.	2	4.7
Philadelphia, Pa.	55	3.6
New York, N. Y.	173	3.1
Kings, N. Y.	122	3.0
Hamilton, Ohio	7	2.8
Los Angeles, Cal.	121	2.5
Cuyahoga, Ohio	31	1.9
Hudson, N. J.	19	1.3
Monroe, Mich.	1	1.2
St. Louis City, Mo.	20	1.0
Essex, Mass.	5	.9
Queens, N. Y.	29	.8
Jefferson, Wis.	1	.7
Union, N. J.	5	.6
Wayne, Mich.	14	.5
Suffolk, Mass.	11	.5
Fairfield, Conn.	8	.4
Franklin, Vt.	1	.4
Bronx, N. Y.	28	.4
Total Above Counties	804	35.9
Industry Total	1,200	46.0
% of U. S.	67.0	78.0

*3481—Nails and Spikes

Cook, Ill.	10	.5
Cheshire, N. H.	1	.4
Plymouth, Mass.	4	.2
Cuyahoga, Ohio	2	.1
Total Above Counties	17	1.2
Industry Total	77	2.5
% of U. S.	22.1	48.0

*3485—Wirework, N. E. C.

Cook, Ill.	109	5.4
Wayne, Mich.	39	3.7
Cuyahoga, Ohio	46	3.5
Los Angeles, Cal.	102	3.0
Hartford, Conn.	31	2.5
Kings, N. Y.	54	2.0
York, Pa.	8	2.0
St. Louis City, Mo.	17	1.4
Worcester, Mass.	12	1.3
New York, N. Y.	55	1.0
Essex, N. J.	17	1.0
Bronx, N. Y.	19	.9
Delaware, Pa.	2	.9
Mercer, N. J.	3	.9
Baltimore City Md.	12	.9
Kent, Mich.	6	.8
Tippecanoe, Ind.	1	.7
Fairfield, Conn.	16	.7
Allegheny, Pa.	17	.7
Calhoun, Mich.	1	.7
Total Above Counties	567	34.0
Industry Total	1,275	53.6
% of U. S.	44.4	63.4

*3491—Metal Barrels, Drums and Pails

Trumbull, Ohio	3	1.3
Cook, Ill.	8	1.3
Los Angeles, Cal.	2	1.0
Baltimore, Md.	1	.9
Contra Costa, Cal.	2	.5
Hudson, N. J.	2	.5
Harris, Tex.	2	.4
Middlesex, Mass.	2	.4
Union, N. J.	3	.4
Jefferson, La.	4	.4
Jefferson, Tex.	3	.4
Lucas, Ohio	2	.4
Coshocton, Ohio	1	.4
Philadelphia, Pa.	8	.4
Jefferson, Ala.	3	.3
Cuyahoga, Ohio	4	.3
Gage, Neb.	1	.2
Venango, Pa.	1	.2
Wyandotte, Kan.	1	.2
Alameda, Cal.	1	.2
Total Above Counties	51	10.1
Industry Total	96	10.3
% of U. S.	53.1	98.1

*3492—Safes and Vaults

Butler, Ohio	4	1.5
Stark, Ohio	1	1.4
Kenton, Ky.	1	.1
Tippecanoe, Ind.	2	.1
Total Above Counties	8	3.1
Industry Total	26	3.2
% of U. S.	30.8	96.9

*3493—Steel Springs

Wayne, Mich.	9	1.5
Cook, Ill.	10	.6
Westmoreland, Pa.	2	.6
Allegheny, Pa.	6	.5
Albany, N.Y.	1	.4
Lucas, Ohio	2	.4
Lake, Ind.	1	.3
Union, N. J.	2	.3
St. Louis, Mo.	1	.3
Lawrence, Pa.	1	.3
Alameda, Cal.	2	.2
Erie, N. Y.	1	.2
Los Angeles, Cal.	8	.1
Macomb, Mich.	3	.1
Total Above Counties	49	5.8
Industry Total	102	6.4
% of U. S.	48.0	91.0

* Old SIC Code.

©SM, 1959.

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 34 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*3494—Bolts, Nuts, Washers and Rivets		
Cuyahoga, Ohio	35	7.3
Cook, Ill.	53	6.5
Winnebago, Ill.	9	2.9
Wayne, Mich.	29	2.6
Allegheny, Pa.	5	2.3
Montgomery, Pa.	7	2.1
Middlesex, Mass.	5	2.1
Los Angeles, Cal.	40	1.5
New Haven, Conn.	17	1.3
Hartford, Conn.	7	1.3
Union, N. J.	7	1.2
Macomb, Mich.	6	1.1
Lake, Ind.	4	.9
Worcester, Mass.	4	.9
Franklin, Ohio	3	.8
Westchester, N. Y.	5	.8
New York, N. Y.	7	.8
Providence, R. I.	7	.8
Bristol, Mass.	6	.8
Philadelphia, Pa.	6	.7
Total Above Counties	264	38.7
Industry Total	457	53.3

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
% of U. S.	57.8	72.6
*3495—Screw-Machine Products		
Cook, Ill.	195	4.0
Cuyahoga, Ohio	88	2.4
Los Angeles, Cal.	139	2.0
Wayne, Mich.	125	1.6
Lorain, Ohio	11	1.4
New Haven, Conn.	70	1.3
Hartford, Conn.	51	1.3
Oakland, Mich.	49	.8
Marion, Ind.	20	.7
Essex, N. J.	39	.7
St. Louis City, Mo.	15	.6
Providence, R. I.	33	.6
Macomb, Mich.	32	.5
Worcester, Mass.	18	.5
Kings, N. Y.	40	.5
Hennepin, Minn.	16	.5
Monroe, N. Y.	17	.4
Washtenaw, Mich.	7	.4
Queens, N. Y.	16	.4
Middlesex, Mass.	21	.4
Total Above Counties	1,002	21.0

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Industry Total	1,795	33.6
% of U. S.	55.8	62.5
*3496—Collapsible Tubes		
Delaware, Pa.	1	.6
Ohio, W. Va.	1	.6
Essex, N. J.	3	.5
New London, Conn.	1	.3
Union, N. J.	1	.3
Jackson, Ark.	1	.3
Warren, N. J.	1	.3
Queens, N. Y.	1	.2
Bergen, N. J.	1	.2
Cook, Ill.	1	.2
Butte, Cal.	1	.1
Hudson, N. J.	1	.1
Total Above Counties	14	3.7
Industry Total	21	3.8
% of U. S.	66.7	97.4
*3497—Metal Foil		
Jefferson, Ky.	8	1.4

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Richmond City, Va.	2	1.1
St. Louis City, Mo.	2	.7
Westmoreland, Pa.	1	.7
Kings, N. Y.	8	.6
Santa Clara, Cal.	1	.5
Bergen, N. J.	5	.5
Fairfield, Conn.	4	.2
Forsyth, N. C.	2	.2
Blount, Tenn.	1	.2
Jackson, Ark.	1	.2
Hartford, Conn.	3	.2
Hudson, N. J.	2	.2
Philadelphia, Pa.	1	.1
Total Above Counties	38	6.8
Industry Total	66	6.8
% of U. S.	57.6	100.0
*3499—Fabricated Metal Products, N. E. C.		
Cook, Ill.	80	1.7
Kings, N. Y.	68	1.5
Los Angeles, Cal.	80	1.2

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
New York, N. Y.	71	.7
Porter, Ind.	2	.6
Philadelphia, Pa.	12	.4
Hennepin, Minn.	10	.4
Morris, N. J.	1	.4
Cuyahoga, Ohio	19	.4
McHenry, Ill.	2	.3
Montcalm, Mich.	1	.3
La Salle, Ill.	1	.3
Wayne, Mich.	26	.3
Bergen, N. J.	11	.3
Marion, Ind.	6	.2
Queens, N. Y.	23	.2
Westchester, N. Y.	8	.2
Baltimore, Md.	3	.2
Elk, Pa.	1	.2
Luzerne, Pa.	2	.1
Total Above Counties	429	9.9
Industry Total	1,026	16.3
% of U. S.	41.8	60.7

Manufacture of Machinery (Except Electrical)—SIC 35

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 35

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*3511—Steam Engines and Turbines		
Delaware, Pa.	2	9.7
Schenectady, N. Y.	1	8.6
Essex, Mass.	1	5.4
Milwaukee, Wis.	2	2.3
Westmoreland, Pa.	1	1.5
York, Pa.	2	1.0
Worcester, Mass.	4	1.0
Allegheny, N. Y.	1	.8
New London, Conn.	1	.3
Hartford, Conn.	1	.3
Des Moines, Iowa	1	.3
San Francisco, Cal.	1	.3
Erie, Pa.	1	.3
Total Above Counties	19	31.8
Industry Total	22	43.0
% of U. S.	86.4	74.0
*3519—Internal Combustion Engines		
Wayne, Mich.	11	6.7
Milwaukee, Wis.	7	5.5
Muskegon, Mich.	2	5.0
Cook, Ill.	5	4.2
Rock, Wis.	1	3.9
Mercer, Pa.	1	3.6
Lake, Ill.	1	3.1
Cuyahoga, Ohio	1	1.6

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Stark, Ohio	1	1.6
Waukesha, Wis.	1	1.3
Bartholomew, Ind.	1	1.2
Hampden, Mass.	1	1.1
Cayuga, N. Y.	1	1.1
Knox, Ohio	1	1.1
Alameda, Cal.	3	1.0
Knox, Ill.	1	.9
Clark, Ohio	2	.7
Hennepin, Minn.	1	.7
St. Louis City, Mo.	1	.7
Schenectady, N. Y.	1	.7
Total Above Counties	44	45.7
Industry Total	119	57.5
% of U. S.	37.0	79.5
*3521—Tractors		
Cook, Ill.	3	7.9
Black Hawk, Iowa	1	7.0
Milwaukee, Wis.	5	6.1
Rock Island, Ill.	2	4.7
Racine, Wis.	3	3.6
Sangamon, Ill.	1	3.3
Wayne, Mich.	7	3.2
Jefferson, Ky.	2	3.1
Hennepin, Minn.	3	1.8
Dubuque, Iowa	2	1.4
Floyd, Iowa	1	1.4
Cuyahoga, Ohio	4	.8
York, Pa.	1	.7
Linn, Iowa	1	.7

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Stephens, Ga.	1	.7
Kankakee, Ill.	1	.7
Lake, Ill.	1	.6
Ozaukee, Wis.	2	.5
Peoria, Ill.	1	.4
Vermilion, Ill.	2	.4
Total Above Counties	44	49.0
Industry Total	154	61.6
% of U. S.	28.6	79.5
*3522—Farm Machinery, except Tractors		
Rock Island, Ill.	7	14.4
Polk, Iowa	8	2.9
Shelby, Tenn.	7	2.6
Cook, Ill.	17	2.6
Hennepin, Minn.	20	2.0
Wayne, Ind.	7	1.6
La Crosse, Wis.	2	1.5
Winnebago, Ill.	3	1.5
La Porte, Ind.	1	1.4
Wapello, Iowa	1	1.4
Fulton, Ill.	1	1.4
Lancaster, Pa.	10	1.4
Scott, Iowa	4	1.3
St. Joseph, Ind.	2	1.1
Dutchess, N. Y.	1	1.1
Mercer, Ohio	5	1.1
Racine, Wis.	8	1.1
Ingham, Mich.	4	1.0
Adams, Ill.	5	.8

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Genesee, N. Y.	5	.8
Total Above Counties	118	43.0
Industry Total	1,205	69.8
% of U. S.	9.8	61.6
*3531—Construction and Mining Machinery		
Tazewell, Ill.	1	22.5
Milwaukee, Wis.	18	9.0
Cook, Ill.	30	4.6
Will, Ill.	2	4.0
Franklin, Ohio	3	3.4
Linn, Iowa	4	3.1
Cuyahoga, Ohio	16	2.9
Kane, Ill.	2	2.5
Marion, Ohio	4	2.4
Peoria, Ill.	2	1.9
Macon, Ill.	1	1.7
Allen, Ohio	1	1.7
Erie, Pa.	2	1.6
Los Angeles, Cal.	43	1.4
Bay, Mich.	2	1.4
Marion, Ind.	5	1.4
Crawford, Ohio	12	1.3
Denver, Col.	14	1.3
Hennepin, Minn.	7	1.2
Vanderburgh, Ind.	2	1.2
Total Above Counties	171	70.5

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Industry Total	626	74.4
% of U. S.	27.3	94.8
*3532—Oil-Field Machinery and Tools		
Harris, Tex.	72	11.1
Los Angeles, Cal.	48	5.3
Tulsa, Okla.	36	2.8
Dallas, Tex.	20	1.9
Stephens, Okla.	2	1.5
Lucas, Ohio	2	1.3
Angelina, Tex.	1	1.3
Venango, Pa.	2	1.2
Oklahoma, Okla.	13	.6
Wichita, Tex.	7	.5
Wood, W. Va.	5	.5
Salt Lake, Utah	2	.5
Fairfield, Ohio	1	.4
Jefferson, Tex.	3	.4
Garfield, Okla.	3	.4
Navarro, Tex.	1	.4
Sedgwick, Kan.	1	.4
Beaver, Pa.	2	.3
Montgomery, Kan.	3	.2
Caddo, La.	2	.2
Total Above Counties	226	31.2
Industry Total	345	33.3
% of U. S.	65.5	93.7
*3541—Machine Tools		
Hamilton, Ohio	29	7.0
Cuyahoga, Ohio	36	6.0

* Old SIC Code.

©SM, 1959.

Manufacture of Machinery (Except Electrical)—SIC 35—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 35 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Winnebago, Ill.	13	5.1
Hartford, Conn.	14	5.0
Wayne, Mich.	58	4.5
Windsor, Vt.	4	4.0
Providence, R. I.	9	3.7
Fairfield, Conn.	14	3.4
Worcester, Mass.	18	3.2
Monroe, N. Y.	8	2.2
Milwaukee, Wis.	12	2.0
Franklin, Pa.	1	1.2
Butler, Ohio	1	1.2
Shelby, Ohio	3	1.2
Dane, Wis.	2	1.1
Cook, Ill.	36	1.0
Fond du Lac, Wis.	1	1.0
Los Angeles, Cal.	45	.8
Middlesex, Mass.	12	.7
Hampden, Mass.	3	.7
Total Above Counties	319	55.0
Industry Total	899	61.8
% of U. S.	48.9	89.0

*3542—Metalworking Machinery

Cook, Ill.	57	9.0
Allegheny, Pa.	8	4.1
Cuyahoga, Ohio	24	2.4
Lawrence, Pa.	3	2.3
Stark, Ohio	1	2.1
Baltimore, Md.	1	1.7
Essex, N. J.	10	1.7
Onondaga, N. Y.	6	1.5
Hamilton, Ohio	6	1.3
Erie, N. Y.	2	1.3
Carroll, Md.	1	1.1
Mahoning, Ohio	5	1.1
Barry, Mich.	1	.9
Herkimer, N. Y.	1	.9
Lucas, Ohio	5	.9
Worcester, Mass.	6	.9
Kane, Ill.	2	.8
New Haven, Conn.	9	.8
San Francisco, Cal.	7	.8
Ontario, N. Y.	2	.7
Total Above Counties	157	36.3
Industry Total	501	48.0
% of U. S.	31.3	75.6

*3544—Special Dies and Tools

Wayne, Mich.	382	15.0
Cook, Ill.	291	3.6
Los Angeles, Cal.	220	3.5
Oakland, Mich.	142	3.3
Cuyahoga, Ohio	185	3.2
Macomb, Mich.	148	3.0
Montgomery, Ohio	81	2.4
Milwaukee, Wis.	97	1.9
Allegheny, Pa.	24	1.4
Essex, N. J.	99	1.3
Marion, Ind.	66	1.3
Fairfield, Conn.	69	1.2
Hartford, Con.	77	1.2
Union, N. J.	70	1.2
Philadelphia, Pa.	74	1.2
New York, N. Y.	101	.9
Worcester, Mass.	41	.9
St. Joseph, Ind.	19	.9
Monroe, N. Y.	55	.8
Ingham, Mich.	17	.7
Total Above Counties	2,256	49.5
Industry Total	4,365	75.0
% of U. S.	51.0	66.0

*3545—Metalworking Machinery Attachments

Wayne, Mich.	124	3.3
Cook, Ill.	72	3.3
Oakland, Mich.	80	3.0
Cuyahoga, Ohio	44	3.0
Macomb, Mich.	41	2.5
Worcester, Mass.	11	2.5
Hartford, Conn.	36	2.1
Saginaw, Mich.	8	2.1
Providence, R. I.	17	1.7
Bristol, Mass.	9	1.5
Franklin, Mass.	7	1.5
Montgomery, Ohio	13	1.3
Franklin, Pa.	3	.7
Los Angeles, Cal.	68	.7
Allegheny, Pa.	5	.7
Westmoreland, Pa.	4	.7
Hamilton, Ohio	5	.6
Dauphin, Pa.	5	.4
Lake, Ill.	4	.4
Middlesex, Mass.	11	.3
Total Above Counties	570	32.3
Industry Total	1,022	34.3
% of U. S.	55.8	94.2

*3561—Food Products Machinery

Cook, Ill.	73	4.5
Miami, Ohio	2	1.7
Wayne, Mich.	4	1.6
Baltimore City, Md.	12	1.5
Los Angeles, Cal.	52	.9
Milwaukee, Wis.	9	.9
York, Pa.	6	.9
Saginaw, Mich.	4	.8
Norfolk, Mass.	5	.8
Jefferson, Wis.	4	.7
Hamilton, Ohio	9	.7
Santa Clara, Cal.	10	.7
Polk, Fla.	2	.7
Middlesex, Conn.	1	.6
Middlesex, Mass.	9	.5
Hennepin, Minn.	13	.4
Vermilion, Ill.	1	.3
La Porte, Ind.	1	.3
Herkimer, N. Y.	1	.3
San Francisco, Cal.	14	.3
Total Above Counties	232	19.1
Industry Total	672	29.9
% of U. S.	34.5	63.9

*3562—Textile Machinery

Worcester, Mass.	27	7.1
Berks, Pa.	4	2.4
Providence, R. I.	31	2.1
York, Me.	1	2.1
Philadelphia, Pa.	23	2.0
Belknap, N. H.	3	1.5
Gaston, N. C.	31	1.5
Greenville, S. C.	17	1.2
Passaic, N. J.	32	.8
Montgomery, Pa.	7	.7
Winnebago, Ill.	1	.7
Essex, Mass.	10	.7
Mecklenburg, N. C.	16	.6
Bristol, Mass.	22	.6
Hillsborough, N. H.	5	.5
Middlesex, Mass.	16	.4
Lee, N. C.	2	.4
Essex, N. J.	2	.4
Grafton, N. H.	1	.3
Berkshire, Mass.	1	.3
Total Above Counties	254	26.3
Industry Total	530	32.6
% of U. S.	47.9	80.7

*3563—Woodworking Machinery

Los Angeles, Cal.	17	1.5
Fairfield, Conn.	4	.8
Washtenaw, Mich.	1	.6
Rock, Wis.	2	.6
Multnomah, Ore.	12	.5
Will, Ill.	2	.4
Lancaster, Pa.	1	.4
Morris, N. J.	1	.4
King, Wash.	7	.4
Kent, Mich.	3	.3
Hamilton, Tenn.	3	.3
Logan, Ohio	1	.2
Suffolk, Mass.	2	.2
Winnebago, Wis.	4	.2
Alameda, Cal.	2	.2
Lake, Ohio	1	.2
Middlesex, Mass.	4	.2
Lenawee, Mich.	1	.2
Milwaukee, Wis.	2	.2
Guilford, N. C.	5	.2
Total Above Counties	80	8.0
Industry Total	249	10.6
% of U. S.	32.1	75.5

*3564—Paper-Industries Machinery

Rock, Wis.	1	1.7
Hillsborough, N. H.	4	1.3
Kings, N. Y.	7	.8
Worcester, Mass.	10	.8
Butler, Ohio	2	.7
New Castle, Del.	1	.7
Outagamie, Wis.	5	.6
Norfolk, Mass.	2	.5
Camden, N. J.	1	.4
Washington, N. Y.	2	.4
Clark, Ohio	1	.4
Clinton, N. Y.	1	.4
Essex, Mass.	5	.4
Chester, Pa.	2	.4
Berkshire, Mass.	2	.4
Marathon, Wis.	1	.4
New York, N. Y.	3	.4
Philadelphia, Pa.	7	.2
Union, N. J.	2	.2
Monroe, N. Y.	4	.2
Total Above Counties	63	11.3
Industry Total	165	13.4
% of U. S.	38.2	84.3

*3565—Printing Trades Machinery

Cook, Ill.	52	4.6
Kings, N. Y.	15	3.7
Union, N. J.	7	1.4
Bronx, N. Y.	3	1.0
Cuyahoga, Ohio	8	.9
Montgomery, Ohio	4	.8
New London, Conn.	1	.5
Philadelphia, Pa.	12	.5
New York, N. Y.	39	.5
Ottawa, Mich.	1	.4
Allegheny, Pa.	2	.4
Rockland, N. Y.	1	.4
Strafford, N. H.	2	.4
Los Angeles, Cal.	21	.3
Queens, N. Y.	10	.3
Passaic, N. J.	4	.3
Stark, Ohio	1	.2
Racine, Wis.	1	.2
Hartford, Conn.	2	.2
Shelby, Ohio	1	.2
Total Above Counties	187	17.2
Industry Total	360	19.8
% of U. S.	51.9	86.9

*3566—Special-Industry N. E. C.

Cuyahoga, Ohio	33	2.7
Hampden, Mass.	3	2.2
Cook, Ill.	63	2.2
Essex, Mass.	16	2.1
Summit, Ohio	19	1.9
Essex, N. J.	18	1.8
Dallas, Tex.	12	1.7
Philadelphia, Pa.	26	1.6
New Haven, Conn.	5	1.5
Wayne, Mich.	24	1.1
Warren, Pa.	2	.9
Monroe, N. Y.	6	.9
Lycoming, Pa.	4	.9
New Castle, Del.	7	.9
Hamilton, Ohio	10	.8
Middlesex, Mass.	13	.8
Columbia, Ohio	8	.8
Hudson, N. J.	9	.7
St. Joseph, Ind.	2	.7
Alpena, Mich.	2	.7
Total Above Counties	282	26.9
Industry Total	922	42.3
% of U. S.	30.6	63.6

*3581—Pumps and Compressors

Los Angeles, Cal.	43	4.1
Wayne, Mich.	12	3.2
Cook, Ill.	32	3.2
Hudson, N. J.	4	3.1
Steuben, N. Y.	1	3.1
Cattaraugus, N. Y.	1	2.0
Mercer, N. J.	1	1.9
Warren, N. J.	1	1.9
Erie, N. Y.	3	1.7
Lucas, Ohio	2	1.5
Milwaukee, Wis.	10	1.5
Venango, Pa.	3	1.4
Adams, Ill.	4	1.4
Montgomery, Ohio	7	1.2
Winnebago, Ill.	3	1.1
Nassau, N. Y.	1	1.1
Wyandotte, Kan.	1	1.0
Fairfield, Conn.	4	.8
Kalamazoo, Mich.	1	.8
Seneca, N. Y.	1	.7
Total Above Counties	135	36.7
Industry Total	496	58.3
% of U. S.	27.2	65.2

*3582—Elevators and Escalators

Hudson, N. J.	2	3.0
Westchester, N. Y.	1	2.2
Lucas, Ohio	2	.4
Shelby, Tenn.	2	.4
Montgomery, Pa.	1	.4
Hamilton, Ohio	3	.3
Cook, Ill.	12	.3
Los Angeles, Cal.	6	.2
San Francisco, Cal.	6	.2
Montgomery, Ohio	3	.2
Wyoming, N. Y.	1	.2
Middlesex, Mass.	2	.2
Queens, N. Y.	1	.2
Rock Island, Ill.	1	.2
Milwaukee, Wis.	4	.2
Jefferson, Ky.	3	.2
Philadelphia, Pa.	6	.1
Kings, N. Y.	2	.1
Polk, Iowa	2	.1
Total Above Counties	60	9.1
Industry Total	131	10.1
% of U. S.	45.8	90.1

*3583—Conveyors

Milwaukee, Wis.	6	3.5
Cook, Ill.	24	3.3
Wayne, Mich.	27	2.7
Cuyahoga, Ohio	11	1.5
Muskegon, Mich.	1	1.4
Stark, Ohio	2	1.4
Lake, Ohio	2	.8
Montgomery, Pa.	2	.8
Jefferson, Ala.	2	.7
Schuyler, N. Y.	1	.7
Kane, Ill.	1	.7
Los Angeles, Cal.	18	.6
Passaic, N. J.	6	.5
Indiana, Pa.	2	.5
Jefferson, Ky.	2	.5
Allegheny, Pa.	3	.4
Monmouth, N. J.	1	.4
Lawrence, Pa.	1	.4
Seneca, Ohio	1	.4

* Old SIC Code.

©SM, 1959.



"There's so much new stuff breaking"

"With the new South works on two shifts and our automatic model making sales records, the boys in the shop really have us hopping. Time was when I could keep up with new equipment and methods by talking to salesmen and our own people. But things are changing so fast now and we're so rushed, I have to keep up by reading at home nights."

This is a real problem for the hard-pressed engineers and executives in Metalworking personified by our hypothetical Hal Dilway. They have to keep pace with fast-breaking technical developments in a dynamic field. Reading a publication like American Machinist is a "must" in their jobs.

American Machinist gives them what they want and need to know – fast. Cover to cover, it's production-minded. This is why it's consistently the "most useful" publication in its field. It's one of the reasons why more production men subscribe to it than to any other Metalworking publication. It's also why so many of them say . . .

"I have to read American Machinist"

McGraw-Hill Magazine of Metalworking Production
330 West 42nd Street, New York 36, New York

Manufacture of Machinery (Except Electrical)—SIC 35—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 35 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Washington, Neb.	1	.4
Total Above Counties	114	21.6
Industry Total	388	32.2
% of U. S.	29.3	67.1
***3564—Blowers and Fans**		
Milwaukee, Wis.	5	1.8
Erie, N. Y.	3	1.5
Los Angeles, Cal.	17	1.4
Jefferson, Ky.	3	1.4
Wayne, Mich.	3	1.0
Cook, Ill.	13	.8
Somerset, N. J.	1	.7
Hamilton, Ohio	4	.7
Fayette, Ind.	1	.7
Montgomery, Ohio	1	.7
Franklin, Ohio	1	.7
Shelby, Tenn.	3	.7
Cuyahoga, Ohio	8	.6
Kalamazoo, Mich.	2	.5
Union, N. J.	3	.4
Fairfield, Conn.	6	.3
Marion, Ind.	6	.3
St. Louis City, Mo.	5	.3
Miami, Ohio	3	.2
Tuscarawas, Ohio	1	.2
Total Above Counties	88	14.9
Industry Total	214	16.5
% of U.	41.1	90.3
***3565—Industrial Trucks and Tractors**		
Philadelphia, Pa.	3	3.2
Cuyahoga, Ohio	9	2.0
Calhoun, Mich.	1	1.5
Cook, Ill.	23	1.3
Multnomah, Ore.	7	.9
Berrien, Mich.	2	.7
Middlesex, Mass.	3	.7
Hennepin, Minn.	3	.4
Vermilion, Ill.	1	.4
St. Francis, Ark.	1	.4
Los Angeles, Cal.	15	.3
Macomb, Mich.	2	.3
Davidson, Tenn.	2	.2
Floyd, Ga.	1	.2
Chenango, N. Y.	1	.2
Lake, Ind.	1	.2
Wayne, Mich.	6	.2
Washington, Pa.	1	.2
Rice, Minn.	1	.2
Oklahoma, Okla.	2	.2
Total Above Counties	85	13.7
Industry Total	244	15.8
% of U. S.	34.8	86.7
***3566 Power Transmission Equipment**		
Marion, Ind.	8	5.4
Cook, Ill.	45	4.0
Cuyahoga, Ohio	21	3.4
Milwaukee, Wis.	15	3.0
Wayne, Mich.	23	3.0
Philadelphia, Pa.	13	2.7
Norfolk, Mass.	2	2.7
Hampden, Mass.	5	1.3
Winnebago, Ill.	7	1.3
Lawrence, Pa.	2	1.1
Hamilton, Ohio	4	1.1
Tompkins, N. Y.	1	1.1
Erie, Pa.	4	.9
Hartford, Conn.	8	.8
Passaic, N. J.	3	.8
Lucas, Ohio	5	.8
Los Angeles, Cal.	34	.8
Middlesex, N. J.	3	.8
St. Joseph, Ind.	4	.8
Bartholomew, Ind.	2	.7
Total Above Counties	299	36.5
Industry Total	472	50.2
% of U. S.	44.3	72.1
***3567—Industrial Furnaces and Ovens**		
Cook, Ill.	16	.8
Crawford, Pa.	1	.7
Schenectady, N. Y.	1	.7
Allegheny, Pa.	8	.7
Lucas, Ohio	1	.7
Wayne, Mich.	12	.5
Middlesex, N. J.	1	.4
Columbia, Ohio	1	.4
Hennepin, Minn.	2	.4
Cuyahoga, Ohio	9	.3
Philadelphia, Pa.	4	.2
Kent, Mich.	2	.2
Seneca, Ohio	1	.2
Fairfield, Conn.	2	.2
Duval, Fla.	2	.2
Union, N. J.	2	.2
Winnebago, Ill.	3	.2
Mercer, N. J.	3	.1
Providence, R. I.	5	.1
Los Angeles, Cal.	12	.1
Total Above Counties	88	7.3
Industry Total	164	7.3
% of U. S.	53.7	100.0
***3568—Mechanical Stokers**		
Wayne, Mich.	2	.4
Monroe, Mich.	1	.4
Total Above Counties	3	.8
Industry Total	25	1.0
% of U. S.	12.0	80.0
***3569—General Industrial Machinery, N. E. C.**		
Erie, N. Y.	8	2.5
Hudson, N. J.	7	2.2
Los Angeles, Cal.	36	2.1
Schenectady, N. Y.	1	1.9
Cook, Ill.	44	1.4
Philadelphia, Pa.	9	1.2
Washington, D. C.	1	1.1
Lynchburg City, Va.	1	.9
Middlesex, N. J.	1	.7
Stark, Ohio	2	.7
Fairfield, Ohio	1	.7
Union, N. J.	8	.5
Erie, Pa.	6	.5
Hartford, Conn.	5	.4
Worcester, Mass.	3	.4
Providence, R. I.	4	.4
Waukesha, Wis.	2	.4
Kings, N. Y.	14	.4
Middlesex, Mass.	4	.4
New Haven, Conn.	2	.4
Total Above Counties	159	19.2
Industry Total	464	26.2
% of U. S.	34.3	73.3
***3571—Computing and Related Machines**		
Montgomery, Ohio	1	15.2
Wayne, Mich.	5	10.3
Broome, N. Y.	3	10.2
Dutchess, N. Y.	2	6.8
Alameda, Cal.	2	5.1
Herkimer, N. Y.	1	3.8
Cook, Ill.	7	2.1
Fairfield, Conn.	1	2.0
Los Angeles, Cal.	13	1.9
Essex, N. J.	1	1.9
Hartford, Conn.	1	1.8
Philadelphia, Pa.	3	1.4
Ramsey, Minn.	2	1.1
Tompkins, N. Y.	1	.8
Chautauqua, N. Y.	2	.8
Monroe, N. Y.	1	.6
Maricopa, Ariz.	1	.6
Jefferson, Wis.	1	.4
Bristol, Va.	1	.4
Morris, N. J.	1	.4
Total Above Counties	50	67.8
Industry Total	84	69.5
% of U. S.	59.5	97.6
***3572—Typewriters**		
Hartford, Conn.	3	7.9
Chemung, N. Y.	1	3.3
Tompkins, N. Y.	1	2.5
Fayette, Ky.	1	2.4
Dutchess, N. Y.	1	2.1
Onondaga, N. Y.	1	1.3
McHenry, Ill.	1	.4
Essex, N. J.	1	.4
Litchfield, Conn.	1	.2
Cook, Ill.	2	.1
Total Above Counties	13	20.6
Industry Total	18	20.8
% of U. S.	72.2	99.0
***3576—Scales and Balances**		
Kings, N. Y.	2	.7
Rutland, Vt.	1	.7
Lucas, Ohio	2	.7
Caledonia, Vt.	1	.7
Cook, Ill.	9	.6
Passaic, N. J.	3	.5
New York, N. Y.	4	.2
Winnebago, Ill.	1	.2
Franklin, Ohio	2	.2
Montgomery, Ohio	1	.2
Rock Island, Ill.	1	.2
Total Above Counties	27	4.9
Industry Total	78	5.5
% of U. S.	34.6	89.1
***3579—Office and Store Machines, N. E. C.**		
Cook, Ill.	47	6.2
Cuyahoga, Ohio	6	2.6
Fairfield, Conn.	5	2.0
St. Louis City, Mo.	4	1.2
Essex, N. J.	4	1.1
Middlesex, Mass.	2	.9
Broome, N. Y.	1	.8
Hartford, Conn.	1	.7
Kent, Mich.	1	.6
Kand, Ill.	3	.5
Queens, N. Y.	3	.4
Bristol, Mass.	1	.4
Morris, N. J.	2	.4
Camden, N. J.	1	.4
New York, N. Y.	21	.3
Winnebago, Ill.	1	.2
Worcester, Mass.	2	.2
Los Angeles, Cal.	13	.2
New Haven, Conn.	2	.2
Monroe, N. Y.	3	.2
Total Above Counties	123	19.5
Industry Total	229	20.4
% of U. S.	53.7	95.6
***3581—Domestic Laundry Equipment**		
Berrien, Mich.	1	2.9
Jasper, Iowa	2	2.5
Cook, Ill.	4	2.2
Jefferson, Ky.	1	2.1
Sandusky, Ohio	2	1.4
Cuyahoga, Ohio	3	.6
Tazewell, Ill.	1	.5
Fond du Lac, Wis.	1	.5
Jefferson, Iowa	1	.5
Effingham, Ill.	1	.5
Williamson, Ill.	1	.5
Macomb, Mich.	1	.3
Hamilton, Iowa	1	.3
Erie, Pa.	1	.3
Chautauqua, N. Y.	1	.3
McLean, Ill.	1	.3
Manitowoc, Wis.	1	.3
Fairfield, Conn.	1	.2
McHenry, Ill.	1	.2
St. Louis, Minn.	1	.2
Total Above Counties	27	16.6
Industry Total	56	16.8
% of U. S.	48.2	98.8
***3582—Laundry and Dry-Cleaning Machinery**		
Onondaga, N. Y.	3	1.1
Hamilton, Ohio	2	.8
Rock Island, Ill.	2	.7
Monroe, N. Y.	1	.7
Wayne, Mich.	4	.5
Cook, Ill.	18	.4
Providence, R. I.	1	.4
Milwaukee, Wis.	1	.2
Jefferson, Ky.	1	.2
Dallas, Tex.	2	.2
Total Above Counties	35	5.2
Industry Total	104	7.8
% of U. S.	33.7	66.7
***3583—Sewing Machines**		
Union, N. J.	2	5.0
Fairfield, Conn.	1	1.4
New York, N. Y.	30	.8
Cuyahoga, Ohio	1	.6
New Haven, Conn.	1	.5
Cook, Ill.	3	.5
Anderson, S. C.	1	.5
Middlesex, Mass.	2	.4
McHenry, Ill.	1	.2
St. Louis City, Mo.	2	.2
Hartford, Conn.	1	.2
Total Above Counties	45	10.3
Industry Total	82	10.4
% of U. S.	54.9	99.0
***3584—Vacuum Cleaners**		
Stark, Ohio	2	1.2
Fairfield, Conn.	1	.9
Cook, Ill.	7	.9
Cuyahoga, Ohio	6	.7
McLean, Ill.	1	.7
Lucas, Ohio	2	.5
Erie, Ohio	1	.2
Kings, N. Y.	2	.1
Total Above Counties	22	5.2
Industry Total	39	5.5
% of U. S.	56.4	94.5
***3585—Refrigeration Machinery**		
Montgomery, Ohio	2	21.4
Vanderburgh, Ind.	4	8.4
Onondaga, N. Y.	4	5.9
Jefferson, Ky.	1	5.4
Erie, Pa.	4	5.4
Lenawee, Mich.	5	4.6
Hampden, Mass.	2	4.6
Kent, Mich.	2	3.4
Cook, Ill.	36	3.3
Muskegon, Mich.	1	3.0
St. Louis City, Mo.	19	3.0
Los Angeles, Cal.	41	2.8
La Crosse, Wis.	3	2.8
Franklin, Ohio	5	2.6
Ramsey, Minn.	3	2.3
Wayne, Ind.	4	2.2
Stearns, Minn.	1	2.0
Essex, N. J.	9	2.0
Montcalm, Mich.	2	1.6
Fayette, Ind.	1	1.6
Total Above Counties	149	89.3
Industry Total	586	135.8
% of U.S.	25.4	65.8
***3586 Measuring and Dispensing Pumps**		
Cook, Ill.	2	1.6
Hampden, Mass.	1	1.6
Allen, Ind.	1	.9
Milwaukee, Wis.	2	.7
Wicomico, Md.	1	.7
St. Louis City, Mo.	1	.7
Williams, Ohio	1	.7
Hennepin, Minn.	3	.5
Muskegon, Mich.	1	.4
Erie, Pa.	1	.2
Fannin, Tex.	1	.2
Montgomery, Pa.	1	.2
Total Above Counties	16	8.4
Industry Total	32	9.0
% of U. S.	50.0	93.3

* Old SIC Code.

©SM, 1959.

NOW AVAILABLE!

Machinery's Total Circulation Cross-Analyzed by 4-Digit Standard Industrial Classification and by Title and Occupation

Also Available: A separate 4-Digit Analysis by Size of Plant

For the first time, you can compare MACHINERY's circulation — industry by industry — directly with other publications that provide a 4-Digit Analysis. Now you will be able to see exactly how well each publication covers your most profitable markets.

For example, under the broad 2-Digit Classification 37 (Transportation Equipment), SIC 3711 is "Motor Vehicles." Here is one of the most important of metalworking markets, which buys millions of dollars worth of manufacturing equipment, cutting tools, unit parts and materials every year. With the 4-Digit breakdown you will be able to see how *thoroughly* MACHINERY covers this vital segment of metalworking. Also, you will be able to make direct comparisons of coverage, by Title and Occupation, of the important buying influences in the automotive plants.

Conversely, you will be able to see how little circulation MACHINERY wastes on industries unimportant to you. For example:

Manufacturers of machine tools, cutting tools, unit parts and (above all) of materials, sell very little to Classification 3312 (Blast Furnaces, Steel Works and Rolling Mills). Although MACHINERY's circulation in this category is low, it is concentrated on the machine shops *within these mills*, where a certain amount of metalworking is performed.

And, of course, the 4-Digit breakdown will show up circulation overloads in non-metalworking plants, among wholesalers, sales engineers and other non-buyers.

MACHINERY's 4-Digit Analysis is now ready. If you don't receive your copy soon by mail, write for a copy. Better still, ask your MACHINERY representative next time he calls to demonstrate how this valuable information can be used to place your advertising precisely where it will do the job of covering the important men in the important plants — everywhere in metalworking.

BPA NDP **Machinery**

Metalworking's Monthly Magazine of Engineering and Production

Published by The Industrial Press 93 Worth Street, New York 13, N.Y.

Manufacture of Machinery (Except Electrical)—SIC 35—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 35 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*3585—Service and Household Machines, N. E. C.		
Los Angeles, Cal.	30	1.3
Jefferson, Ky.	2	.8
Milwaukee, Wis.	5	.7
Cook, Ill.	23	.6
Allegheny, Pa.	3	.4
Kent, Mich.	2	.4
Sangamon, Ill.	1	.4
Jackson, Mich.	1	.4
Philadelphia, Pa.	4	.3
Hennepin, Minn.	9	.3
Essex, Mass.	1	.2
Hartford, Conn.	1	.2
Rock Island, Ill.	1	.2
Racine, Wis.	3	.2
Elkhart, Ind.	1	.2
Ramsey, Minn.	4	.2
Essex, N. J.	3	.2
Union, N. J.	4	.2
Delaware, Pa.	1	.2
Darke, Ohio	1	.2
Total Above Counties	100	7.5
Industry Total	238	9.6
% of U. S.	42.0	78.1
*3591—Valves and Fittings, Except Plumbing		
Cook, Ill.	32	13.6
Wayne, Mich.	19	3.9
Los Angeles, Cal.	61	2.7
Hamilton, Ohio	9	2.7
Jefferson, Ky.	3	2.2
Hampden, Mass.	3	2.1
McKean, Pa.	2	2.1
Philadelphia, Pa.	20	1.9
Cuyahoga, Ohio	19	1.9
Macon, Ill.	3	1.7
Suffolk, Mass.	10	1.6
St. Clara, Mich.	3	1.6
Jefferson, Ala.	1	1.5
Westmoreland, Pa.	1	1.4
Marshall, Iowa	2	1.3
Henry, Ill.	1	1.2
Summit, Ohio	5	1.0
Milwaukee, Wis.	7	1.0
Erie, Pa.	6	1.0
Allegheny, Pa.	11	1.0
Total Above Counties	218	47.4
Industry Total	553	75.3
% of U. S.	39.4	62.9
*3592—Fabricated Pipe and Fittings		
Allegheny, Pa.	10	1.9
Harris, Tex.	10	1.0
Los Angeles, Cal.	27	.7
St. Louis City, Mo.	5	.7
Trumbull, Ohio	2	.6
Cook, Ill.	12	.5
Ohio, W. Va.	1	.4
New Castle, Del.	1	.4
Cuyahoga, Ohio	11	.3
Beaver, Pa.	2	.3
Philadelphia, Pa.	7	.2
Oakland, Mich.	1	.2
Hartford, Conn.	3	.2
Queens, N. Y.	5	.2
Mercer, Pa.	2	.2
Belmont, Ohio	1	.2
Washington, Ohio	2	.2
Kosciusko, Ind.	1	.2
Miami, Kan.	1	.2
Summit, Ohio	1	.2
Total Above Counties	105	6.8
Industry Total	246	12.3
% of U. S.	42.7	71.5
*3593—Ball and Roller Bearings		
Hartford, Conn.	11	8.6
Stark, Ohio	3	6.4
New Haven, Conn.	2	3.1
Wayne, Mich.	2	3.0
Franklin, Ohio	1	2.7
Erie, Ohio	1	2.4
Litchfield, Conn.	3	2.0
Chautauqua, N. Y.	2	1.9
Union, N. J.	2	1.8
Cook, Ill.	7	1.6
Fairfield, Conn.	5	1.6
Hudson, N. J.	1	1.5
Marion, Ind.	1	1.0
Dutchess, N. Y.	3	.9
Onondaga, N. Y.	2	.7
Crawford, Ohio	1	.7
Washtenaw, Mich.	3	.7
Muskegon, Mich.	1	.4
Philadelphia, Pa.	6	.4
Tuscarawas, Ohio	1	.4
Total Above Counties	58	41.6
Industry Total	162	49.8
% of U. S.	58.9	83.9
*3594—Industrial Patterns and Molds		
Wayne, Mich.	89	1.9
Cook, Ill.	128	1.8
Los Angeles, Cal.	162	1.4
Cuyahoga, Ohio	62	.9
Worcester, Mass.	30	.7
New York, N. Y.	45	.5
Macomb, Mich.	29	.4
Essex, N. J.	31	.4
Randolph, Ind.	1	.4
Union, N. J.	21	.4
Fairfield, Conn.	26	.3
Lucas, Ohio	19	.3
Montgomery, Ohio	16	.3
Oakland, Mich.	23	.3
Hampden, Mass.	12	.3
Kings, N. Y.	28	.2
Erie, Pa.	13	.2
Providence, R. I.	17	.2
Allegheny, Pa.	17	.2
Athens, Ohio	1	.2
Total Above Counties	770	11.3
Industry Total	1,800	19.6
% of U. S.	42.8	57.7
*3599—Machine Shops		
Los Angeles, Cal.	859	11.2
Cook, Ill.	302	6.2
Cuyahoga, Ohio	213	3.5
Philadelphia, Pa.	110	2.5
Kings, N. Y.	103	2.4
Calhoun, Mich.	5	2.2
Muskegon, Mich.	8	2.0
New Haven, Conn.	64	1.7
Baltimore City, Md.	38	1.6
Middlesex, Mass.	81	1.5
Wayne, Ind.	2	1.5
Hartford, Conn.	54	1.5
Milwaukee, Wis.	88	1.4
Queens, N. Y.	91	1.4
Hudson, N. J.	36	1.3
Oakland, Mich.	90	1.3
New York, N. Y.	108	1.0
Suffolk, Mass.	39	1.0
Erie, N. Y.	67	1.0
Franklin, Ohio	40	.9
Total Above Counties	2,398	47.1
Industry Total	6,823	109.3
% of U. S.	35.1	43.1

* Old SIC Code.

©SM, 1959.

Manufacture of Electrical Machinery—SIC 36

Selling to SIC 36 . . .

By A. M. KENNEDY, JR.,
Vice President,
Purchases and Traffic
Westinghouse Electric Corp.

Fifty percent of our average sales dollar is spent on materials and service. More manufacturing is done for us on the outside than we do ourselves. Accordingly, our crying need is for more and better supplying companies who believe as sincerely as we do in research and development and application engineering.

We are outstripping our suppliers in development of new materials, processes and components to support our new products. In fact, we are doing basic research, applied research and product-development work that our suppliers really should be doing for us.

This should point up, to suppliers, their need for a fuller understanding of our requirements. They need a more aggressive interest in our product design problems and more funds to devote to the development of products within their specialized areas . . . products we will require from them next year and five years in the future.

We are not looking for more sellers, but for more developers. For example, we need better high-temperature alloys for higher operating temperatures in steam and gas turbines; better high-temperature insulation for motors and transformers; a new cooling medium for transformers to replace petroleum products; better aged hardening properties in sheet steel.

There is now greater decentralization in our industry. This means the salesman has more people to call on. However, he should find an advantage in that the people he deals with are much closer to their own needs and have a more intimate knowledge of their own products.

There is great technical advance just ahead, with great opportunities for the strong development supplier. Communication of customers' requirements for development of new products will require technically trained men. You can't develop a product if you don't know what the customer wants and a non-technical man couldn't even communicate the customer's desires. We are placing more and more reliance on suppliers' development abilities and their special application skills.

The cost-squeeze means that now, more than ever, our approach to saving money will be through value-buying rather than price-buying. To reduce costs we believe not in price-chiseling, but in the engineering approach to design and materials utilization for maximum advantage of the characteristics of materials available. On the other hand we are always interested in price, so that the development supplier will constantly have to sell the value of his development and application work. This takes first, demonstrated results. Second, men who are able to do the demonstrating. We will need more technical, more competent application type salesmen in the future.

Today perhaps only 25 to 30 of all the salesmen who call on us can meet such standards.

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 36

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*3611—Wiring Devices and Supplies		
Cook, Ill.	38	6.0
Fairfield, Conn.	13	4.5
Kings, N. Y.	17	3.4
Los Angeles, Cal.	23	3.2
Hartford, Conn.	6	3.0
Onondaga, N. Y.	2	2.4
Allegheny, Pa.	8	2.0
Union, N. J.	7	2.0
Queens, N. Y.	10	1.3
Beaver, Pa.	1	1.3
Providence, R. I.	5	1.3
Montgomery, Pa.	4	1.0
New York, N. Y.	22	1.0
Jefferson, Ala.	3	1.0
Bristol, Mass.	2	.9
Richland, Ohio	1	.9
Mercer, N. J.	3	.8
Alameda, Cal.	1	.8
Kent, R. I.	1	.5
Hudson, N. J.	2	.5
Total Above Counties	169	37.4
Industry Total	395	46.9
% of U. S.	42.8	80.2
*3612—Carbon and Graphite Products		
Niagara, N. Y.	5	1.7
Elk, Pa.	4	1.7
Cuyahoga, Ohio	6	1.2
Maury, Tenn.	1	1.0
Harrison, W. Va.	2	.7

* Old SIC Code.

©SM, 1959.

Electrical Manufacturing

RESEARCH CAN GUIDE YOU

...to sharper marketing strategy

MARKET STUDIES to help you seek out new areas for selling and to re-evaluate existing programs are available for the asking. A partial list of these studies is given below. To obtain copies or for more specific data, check with your ELECTRICAL MANUFACTURING representative or write or phone our Market Research Department, 1250 Sixth Avenue, New York 20, N. Y.

☐ **MACHINE DRIVE COMPONENTS** — Product applications and market data on gears; gear motors, chain drives, belts, clutches, brakes, bearings, air and hydraulic power devices, etc. Based on market survey among 2,000 manufacturers of motor driven machinery and equipment.

☐ **INSTRUMENTS** — This report presents results of a broad study of applications of built-in instruments as original equipment in electrically operated products. Also analyzes the market for 240 kinds of test instruments used in the design, development and production line testing of electrically operated products.

☐ **INSULATED WIRE AND CABLE** — This market study is based on a survey among design engineers in a cross-section of plants making electrically operated industrial machinery, appliances, communications equipment, and primary electrical equipment. The study covers insulation and physical requirements, applications, specifying influences, and limiting factors encountered in the use of power wire and cable, communication wire, magnet wire, aircraft wire and appliance wire.

☐ **MAGNETIC CIRCUIT AND SEMI-CONDUCTOR DEVICES** — This 56-page report is based on a survey of the original equipment market for magnetic amplifiers, static switching controls, constant voltage transformers, servo motors, signal diodes, transistors and semi-conductor rectifiers. Report lists typical product applications, range of ratings, specifying influences; also contains article bibliography.

☐ **MOTORS, CONTROLS AND DRIVE COMPONENTS** — An 88 page report based on a survey of the original equipment market for motors, control units and 20 different mechanical drive elements. Lists 1,478 applications by S.I.C. groupings to help search out new areas of selling. An analysis of specifying factors shows pattern of buying influence.

☐ **INTEGRAL HORSEPOWER MOTORS** — This market study is based on a survey of 500 manufacturers of heavy industrial equipment. Includes data on the extent to which industrial machinery is shipped with motors, present and future use of direct current and specialty motors, specifying influences for integral motors, and the attitude of engineers towards motor pricing policies, service and delivery.

☐ **MATERIALS — METALS AND NON-METALLICS** — This 126 page report points up 1,979 product applications for 86 different types of materials, including ferrous and non-ferrous metals and non-metallic materials.

☐ **ELECTRICAL INSULATING MATERIALS** — This market study is based on a survey among design engineers in a cross-section of product manufacturers that represent the largest users of electrical insulating materials. The study covers basic types of insulation used, temperature and physical requirements, testing procedures, specifying influences, product applications and limiting factors encountered in the use of electrical insulating materials.

☐ **THE VOLUME MARKET** — A compendium of dollar volume shipments of 94 S.I.C. industry groups manufacturing electrically operated products. Unit production figures are shown to help measure the potential of the many industries that make up the one vast market.

☐ **TOTAL PLANT COUNT OF MANUFACTURERS** — A current compilation of establishments manufacturing electrically operated products that have design engineering functions. Plants are grouped according to four-digit S.I.C. classifications and by major market segments.

...to more effective advertising copy

Reader Reaction Reports give readership ratings of advertisements in ELECTRICAL MANUFACTURING based on largest sample employed by business magazine readership studies. A special feature of these reports is the breakdown of scores by 5 major market segments providing advertisers with valuable insight into the interests of design engineer readers by specific product categories. A separate series of Reader Reaction studies also provide continuing measurement of the editorial performance of the magazine by specific subject areas and by major market segments, based on the Standard Industrial Classification.

The monthly magazine of DESIGN ENGINEERING

Electrical Manufacturing

A CONOVER-MAST PUBLICATION

Manufacture of Electrical Machinery—SIC 36—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 36 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Seneca, Ohio	1	.7
Queens, N. Y.	2	.4
Burke, N. C.	1	.4
Jefferson, Pa.	1	.2
Cook, Ill.	4	.2
Total Above Counties	27	8.2
Industry Total	53	9.3
% of U. S.	50.9	88.8

*3613—Electrical Measuring Instruments

Essex, N. J.	14	6.6
Essex, Mass.	1	4.7
Philadelphia, Pa.	13	3.7
Sangamon, Ill.	2	2.6
Cook, Ill.	17	2.0
Los Angeles, Cal.	42	1.8
Strafford, N. H.	1	1.7
Queens, N. Y.	9	1.7
Tippecanoe, Ind.	1	1.5
Wake, N. C.	1	1.2
Santa Clara, Cal.	1	1.1
Middlesex, Mass.	12	.9
Cuyahoga, Ohio	6	.9
Kings, N. Y.	8	.8
Allen, Ohio	1	.4
Washington, Ore.	1	.4
New York, N. Y.	13	.4
Lehigh, Pa.	1	.4
Kalamazoo, Mich.	1	.4
Contra Costa, Cal.	1	.4
Total Above Counties	146	33.4
Industry Total	304	34.0
% of U. S.	48.0	98.2

*3614—Motors and Generators

Montgomery, Ohio	7	11.9
Erie, N. Y.	3	7.0
Allen, Ind.	6	6.9
Schenectady, N. Y.	2	6.5
Allegheny, Pa.	5	6.2
Monroe, N. Y.	4	5.4
Cuyahoga, Ohio	14	5.2
St. Louis City, Mo.	6	5.1
Milwaukee, Wis.	3	3.7
Essex, Mass.	1	3.3
Monmouth, N. J.	1	3.3
Allen, Ohio	3	3.1
St. Louis, Mo.	1	2.3
Hamilton, Ohio	3	1.9
Clark, Ohio	1	1.7
Essex, N. J.	7	1.6
Somerset, N. J.	2	1.5
Cook, Ill.	20	1.5
New Haven, Conn.	5	1.4
Hennepin, Minn.	4	1.4
Total Above Counties	98	80.9
Industry Total	309	110.6
% of U. S.	31.7	73.1

*3615—Transformers

Berkshire, Mass.	2	8.1
Mercer, Pa.	1	7.8
Cook, Ill.	17	3.3
Santa Clara, Cal.	2	3.3
Allegheny, Pa.	1	2.5
Milwaukee, Wis.	3	1.9
Washington, Pa.	1	1.6
Floyd, Ga.	1	1.5
Allen, Ind.	1	1.3
St. Louis, Mo.	3	1.3
St. Louis City, Mo.	1	1.2
Muskingum, Ohio	1	1.1
Vermilion, Ill.	1	.7
Hampden, Mass.	1	.7
Bay, Mich.	1	.7
Cattaraugus, N. Y.	1	.6
Hudson, N. J.	3	.6
Kern, Cal.	1	.4
Alameda, Cal.	6	.3
Essex, N. J.	10	.3
Total Above Counties	58	39.2
Industry Total	164	41.2
% of U. S.	35.4	95.1

*3616—Electrical Control Apparatus

Milwaukee, Wis.	13	12.7
Philadelphia, Pa.	12	11.0
Cook, Ill.	46	5.3
Schenectady, N. Y.	3	4.4
Allegheny, Pa.	5	4.2
Wayne, Mich.	19	3.1
Los Angeles, Cal.	34	3.0
St. Louis City, Mo.	8	3.0
Hartford, Conn.	9	2.7
Cuyahoga, Ohio	15	2.5
Beaver, Pa.	1	1.9
Stephenson, Ill.	1	1.7
Roanoke City, Va.	1	1.6
Kings, N. Y.	16	1.5
Essex, N. J.	10	1.4
Westchester, N. Y.	5	1.3
Dauphin, Pa.	1	1.2
Middlesex, Mass.	4	1.1
Suffolk, Mass.	8	1.0
Lehigh, Pa.	1	1.0
Total Above Counties	214	65.6
Industry Total	453	78.6
% of U. S.	47.2	83.5

*3617—Electrical Welding Apparatus

Cuyahoga, Ohio	5	1.3
Miami, Ohio	1	.7
Wayne, Mich.	12	.6
Cook, Ill.	9	.6
York, Pa.	3	.5
Trumbull, Ohio	2	.5
Bay, Mich.	5	.5
Milwaukee, Wis.	4	.4
Hennepin, Minn.	2	.4
Baltimore, Md.	2	.3
Macomb, Mich.	4	.3
Essex, Mass.	1	.2
Delaware, Pa.	1	.2
Larimer, Col.	1	.2
Delta, Mich.	1	.2
Oakland, Mich.	4	.2
Outagamie, Wis.	1	.2
Los Angeles, Cal.	8	.2
Philadelphia, Pa.	2	.2
Total Above Counties	68	7.7
Industry Total	119	8.2
% of U. S.	57.1	93.9

*3619—Electrical Industrial Apparatus

Cook, Ill.	23	1.4
Bristol, Mass.	1	1.3
Washington, N. Y.	1	1.3
Essex, Mass.	3	.9
Milwaukee, Wis.	4	.8
Los Angeles, Cal.	35	.8
Middlesex, N. J.	2	.7
Passaic, N. J.	1	.7
Fairfield, Conn.	1	.4
McCracken, Ky.	1	.4
Cuyahoga, Ohio	8	.4
Monroe, Ind.	1	.4
Franklin, Ohio	1	.4
Queens, N. Y.	7	.3
Kings, N. Y.	10	.3
York, Me.	1	.2
New Haven, Conn.	3	.2
Wabash, Ind.	1	.2
Tazewell, Va.	1	.2
Hartford, Conn.	3	.2
Total Above Counties	108	11.5
Industry Total	235	13.4
% of U. S.	46.0	85.8

*3621—Electrical Appliances

Cook, Ill.	43	10.8
Richland, Ohio	3	7.0
Fairfield, Conn.	4	3.6
Hartford, Conn.	7	3.1
Jefferson, Ky.	2	2.4
Allegheny, Pa.	3	1.5
Kane, Ill.	2	1.3
Racine, Wis.	2	1.2
Milwaukee, Wis.	4	1.1
Litchfield, Conn.	5	1.0
New York, N. Y.	20	.9
Queens, N. Y.	11	.9
St. Louis City, Mo.	5	.9
Los Angeles, Cal.	20	.9
Sebastian, Ark.	1	.8
San Bernardino, Cal.	1	.7
Dodge, Wis.	1	.7
Licking, Ohio	1	.7
Lancaster, Pa.	1	.7
Philadelphia, Pa.	4	.7
Total Above Counties	139	40.9
Industry Total	365	48.4
% of U. S.	38.1	84.5

*3631—Insulated Wire and Cable

Middlesex, Mass.	4	1.4
Middlesex, N. J.	4	1.1
New Haven, Conn.	81	.1
Union, N. J.	6	.8
Worcester, Mass.	8	.8
Providence, R. I.	4	.8
Passaic, N. J.	4	.8
Oneida, N. Y.	2	.7
Mercer, N. J.	1	.7
Cook, Ill.	9	.5
St. Louis City, Mo.	1	.4
Hudson, N. J.	1	.4
Hampden, Mass.	2	.4
Rockingham, N. H.	1	.4
Warren, Pa.	1	.4
Broome, N. Y.	1	.4
Grant, Ind.	1	.4
De Kalb, Ill.	1	.4
Kings, N. Y.	7	.4
Harris, Tex.	1	.2
Total Above Counties	67	12.9
Industry Total	136	14.8
% of U. S.	49.3	87.2

*3641—Engine Electrical Equipment

Madison, Ind.	1	13.4
Lucas, Ohio	3	6.6
Delaware, N. Y.	1	4.4
Washtenaw, Mich.	1	2.2
Lake, Ill.	2	2.0
Hampden, Mass.	5	1.2
Cass, Ind.	2	1.2
Seneca, Ohio	1	1.2
Lowndes, Miss.	1	1.2
Cook, Ill.	14	.7
Queens, N. Y.	6	.7
Fulton, Ohio	1	.7
Onondaga, N. Y.	1	.7
Suffolk, Mass.	2	.7
Fairfield, Ohio	1	.7
Union, N. J.	2	.7
Essex, N. J.	3	.7
Susquehanna, Pa.	1	.7
Rock, Wis.	1	.4
Northampton, Pa.	1	.4
Total Above Counties	80	40.5
Industry Total	169	46.7
% of U. S.	29.6	86.7

*3651—Electric Lamps

Essex, N. J.	7	5.5
Cuyahoga, Ohio	6	1.9
Essex, Mass.	4	1.9
Trumbull, Ohio	2	1.1
Marion, W. Va.	1	1.1
Lycoming, Pa.	1	.7
Sandusky, Ohio	1	.7
Mercer, N. J.	1	.7
Coles, Ill.	1	.7
Mahoning, Ohio	1	.7
Pulaski, Ark.	1	.6
Suffolk, Mass.	1	.6
Fayette, Ky.	1	.5
Madison, Ky.	1	.4
Crawford, Ohio	1	.4
St. Louis City, Mo.	2	.4
Pickaway, Ohio	1	.4
Hinds, Miss.	1	.4
Hudson, N. J.	3	.4
Shelby, Tenn.	1	.4
Total Above Counties	38	19.5
Industry Total	66	21.3
% of U. S.	57.6	91.5

*3661—Radios and Related Products

Cook, Ill.	228	51.8
Los Angeles, Cal.	184	24.6
Camden, N. J.	13	15.9
Onondaga, N. Y.	4	10.2
Philadelphia, Pa.	25	9.0
Baltimore City, Md.	5	8.3
Queens, N. Y.	61	7.6
Marion, Ind.	13	7.6
Forsyth, N. C.	1	6.7
Dallas, Texas	3	5.9
Linn, Iowa	3	5.6
Hudson, N. J.	18	5.6
Middlesex, Mass.	39	5.5
New York, N. Y.	97	5.1
Essex, N. J.	49	5.0
Howard, Ind.	2	5.0
Kings, N. Y.	45	4.9
Berkshire, Mass.	1	3.9
Oneida, N. Y.	3	3.8
Monroe, Ind.	3	3.8
Total Above Counties	797	195.8
Industry Total	1,747	333.4
% of U. S.	45.6	58.7

*3662—Electronic Tubes

Middlesex, Mass.	8	9.1
Daviess, Ky.	1	5.3
Essex, Mass.	7	4.0
Hudson, N. J.	3	3.7
Essex, N. J.	18	3.5
Lancaster, Pa.	1	3.0
Lehigh, Pa.	1	2.8
San Mateo, Cal.	3	2.6
Montgomery, Pa.	3	2.5
Marion, Ind.	1	2.1
Perry, Ind.	1	1.9
Cook, Ill.	9	1.9
Maricopa, Ariz.	1	1.9
Calhoun, Ala.	1	1.8
Steuben, N. Y.	1	1.7
Norfolk, Mass.	2	1.7
Grant, Ind.	1	1.6
Middlesex, N. J.	1	1.6
Putnam, Ohio	1	1.4
Carbon, Pa.	1	1.4
Total Above Counties	65	55.5
Industry Total	157	72.1
% of U. S.	41.4	77.0

*3663—Phonograph Records

Fairfield, Conn.	3	1.5
Marion, Ind.	1	1.3

* Old SIC Code.

©SM, 1959.

the three sides to sell in RADIO AND ELECTRONICS



The fellows who write the big orders in this business know their market. And they know that hitting that market with year-in, year-out consistency is a three-way proposition. The reason is simple. The radio and electronics engineers of America believe in and wholeheartedly support these three *Institute of Radio Engineers'* services.

Proceedings of the IRE

Here's the engineer's monthly fact sheet — with more pages, more editorial features, and more readers than any publication in its field. Over 54,000 radio-electronics engineers read *Proceedings* because they want to know what's going on and they've discovered *Proceedings* is the place to find out. It's on top of the latest developments in this fast-moving, fast-expanding field.

IRE Directory

More than 1,100 pages long, with circulation well above the 56,000 mark, this unique annual covers the radio-electronics industry from stem to stern. In the Directory you'll find a pinpointed classification of 4,000 manufacturers and 1,500 distributors of radio and electronic equipment along with the products they handle. To help you clinch the sale the *IRE Directory* lists the business phone numbers of 3,500 firms. No wonder they call the *IRE Directory* the "Bluebook" of the radio-electronics industry.

Radio Engineering Show

The radio-electronics "spectacular" held annually at New York's mammoth Coliseum. Here's your personal introduction to 60,000 radio-electronics engineers — the men who use the products you sell and manufacture. They're eager to see your new equipment, to listen to your new ideas. This year, don't pass up this golden opportunity to meet them on their home grounds.

For all the details:

The Institute of Radio Engineers

ADVT. DEPT.: 72 W. 45th STREET • New York 36, N. Y.
MUrray Hill 2-6606

ELECTRICAL WEST provides every essential for effective advertising coverage of the West

1. The most complete Western circulation of any electrical magazine (over 3,500 more than nearest competitor)
2. More than three times the Western utility circulation of any electrical magazine (utilities are responsible for over 70% of electrical construction budgets in 1959)
3. The key to the fastest growing area in the country both in population and electrical construction (by 1975 Western population will increase by 54% while the rest of the country increases less than 25%)
4. A shot at the THIRD straight $1,000,000,000 Western electrical construction budget
5. Full color advertising available at attractive rates.*
6. Evaluation of advertising impact: Readerscope studies measure readership of ads and editorial*

* Call your nearest McGraw-Hill office for more information

IF YOU ARE NOT ADVERTISING IN

ELECTRICAL WEST

YOU ARE NOT SELLING HARD ENOUGH IN THE WEST

68 Post St., San Francisco 4, California

ABP A McGraw-Hill Publication

Spokesman of the Electrical Industry of the West for 72 years

Manufacture of Electrical Machinery—SIC 36—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 36 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Los Angeles, Cal.	39	1.0
Lackawanna, Pa.	2	.8
New York, N. Y.	41	.5
Fulton, N. Y.	1	.4
Essex, N. J.	5	.4
Wayne, Ind.	1	.4
Jefferson, Ky.	1	.2
Worcester, Mass.	1	.2
Total Above Counties	95	6.7
Industry Total	143	7.2
% of U. S.	66.4	93.1

*3664—Telephone and Telegraph Equipment		
Cook, Ill.	13	32.8
Hudson, N. J.	4	13.7
Marion, Ind.	1	6.5
Essex, Mass.	3	3.7
Monroe, N. Y.	1	3.1
Baltimore City, Md.	1	2.4
Lancaster, Neb.	1	1.2
Erie, N. Y.	1	1.2
San Mateo, Cal.	2	.8
St. Louis, Minn.	1	.8
Crawford, Ohio	1	.8
New Haven, Conn.	1	.8
Suffolk, Mass.	2	.8
Union, N. J.	2	.6
New York, N. Y.	6	.5
De Kalb, Ill.	1	.5
Kings, N. Y.	6	.3
Davidson, Tenn.	2	.2
Morris, N. J.	1	.2
Hardin, Ohio	1	.2
Total Above Counties	51	70.9
Industry Total	74	76.7
% of U. S.	68.9	92.4

*3669—Communications Equipment, N.E.C.		
Allegheny, Pa.	1	4.8
Monroe, N. Y.	4	1.9
Fairfield, Conn.	2	1.4
New York, N. Y.	11	.9
Cook, Ill.	18	.8
Worcester, Mass.	1	.5
Middlesex, Mass.	2	.5
Queens, N. Y.	6	.4
Essex, Mass.	3	.3
Richland, Ohio	1	.3
Lenawee, Mich.	1	.3
Kings, N. Y.	4	.3
Stark, Ohio	1	.3
Total Above Counties	55	12.5
Industry Total	141	13.1
% of U. S.	39.0	95.4

*3691—Storage Batteries		
Philadelphia, Pa.	3	1.3
Delaware, Ind.	2	1.0
Essex, N. J.	1	1.0
Berks, Pa.	4	.9

* Old SIC Code.

©SM, 1959.

Available soon

Plant Names By County, By 4-digit SIC Code

Market Statistics, Inc. is now compiling plant directories, by 4-digit industry classifications (old SIC code) for all large plants (with over 1,000 employes). For full details, write to

Market Statistics, Inc.

630 Third Avenue
New York 17, New York
Phone: YU 6-8557

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 36 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Los Angeles, Cal.	39	.8
Niagara, N. Y.	2	.7
Cuyahoga, Ohio	2	.7
Cook, Ill.	16	.7
Fulton, Ga.	5	.5
Dallas, Tex.	6	.5
Knox, Ind.	1	.4
Shiawassee, Mich.	1	.4
Middlesex, N. J.	1	.4
Kankakee, Ill.	1	.4
Mercer, N. J.	1	.4
Erie, N. Y.	2	.4
Muskingum, Ohio	1	.2
Leavenworth, Kan.	1	.2
Fairfield, Conn.	3	.2
Montgomery, Pa.	1	.2
Total Above Counties	93	11.3
Industry Total	100	14.8

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
% of U. S.	93.0	78.4
*3692—Primary Batteries		
Cuyahoga, Ohio	3	1.8
Stephenson, Ill.	2	.8
Dubuque, Iowa	1	.7
Dane, Wis.	1	.7
Bennington, Vt.	1	.7
Westchester, N. Y.	2	.4
Sandusky, Ohio	1	.4
Woodbury, Iowa	1	.4
Marathon, Wis.	1	.4
Madison, Tenn.	1	.4
Lycoming, Pa.	1	.4
Mecklenburg, N. C.	1	.4
New Haven, Conn.	1	.4
Passaic, N. J.	1	.4
Montgomery, Iowa	1	.4
Worcester, Mass.	1	.2

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Essex, N. J.	1	.2
Juneau, Wis.	1	.2
Jo Daviess, Ill.	1	.2
Fond du Lac, Wis.	1	.2
Total Above Counties	24	9.7
Industry Total	41	10.2
% of U. S.	58.5	95.1
*3693—X-Ray and Therapeutic Apparatus		
Milwaukee, Wis.	4	2.2
Cook, Ill.	24	1.1
Fairfield, Conn.	5	.7
Hamilton, Ohio	2	.5
Kenton, Ky.	1	.5
Baltimore City, Md.	1	.5

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Cuyahoga, Ohio	3	.5
Westchester, N. Y.	4	.5
Middlesex, Mass.	2	.5
Los Angeles, Cal.	13	.2
Rock, Wis.	1	.2
New York, N. Y.	13	.1
Total Above Counties	73	7.8
Industry Total	130	8.0
% of U. S.	56.2	93.8
*3699—Electrical Products, N.E.C.		
Providence, R. I.	3	.9
Buchanan, Mo.	1	.9
Essex, N. J.	7	.7
Queens, N. Y.	5	.6
Kings, N. Y.	22	.6
Westchester, N. Y.	4	.5

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Cook, Ill.	20	.5
Cuyahoga, Ohio	11	.5
Los Angeles, Cal.	20	.4
Hennepin, Minn.	8	.4
De Kalb, Ill.	1	.3
Hudson, N. J.	5	.3
Wayne, N. C.	1	.3
Ashtabula, Ohio	2	.3
Bronx, N. Y.	4	.3
Essex, Mass.	3	.3
New York, N. Y.	24	.3
Osceola, Mich.	1	.3
Lamar, Tex.	1	.3
Fairfield, Conn.	3	.1
Total Above Counties	146	8.8
Industry Total	245	9.9
% of U. S.	59.6	88.9

Manufacture of Transportation Equipment—SIC 37

Selling to SIC 37 . . .

By ART PEARSON,
Purchasing Agent
Northrop Corp., Norair Division

Coordination of vendors' abilities with the ideas of engineers, with manufacturing schedules, and with the requirements of quality control is an important responsibility of purchasing. In all of these aspects the buyer is dependent upon the salesmen who call upon him, because they are his channels of communication.

The salesman is truly "the eyes of the purchasing officer" in our industry.

Routine day-to-day communications from salesmen and their companies are more important than the spectacular exceptional programs. For example, the salesman can help the buyer by:

1. Negotiating quality and reliability into purchased material.
2. Being sure he understands all specification requirements and making sure, in turn, that they are understood by his own shop.
3. Determining absolutely that shipments will not be rejected by Receiving inspection.
4. Developing—where possible—programs of certification of quality.
5. Making sure that all requirements for documentation are properly completed on each shipment.
6. Making certain of schedule compliance. Salesmen should be honest and realistic in delivery promises and should maintain such close communication with their factories that any slip in delivery schedules can be reported immediately to the customer's purchasing office. It is not possible to over-emphasize this point.
7. Watching for ways to help buyers achieve overall dollar savings.

The quality of a purchasing officer's performance is dependent upon the ability of the salesmen who call on him. Each salesman should remember that:

- The purchasing officer is a specialist in vendor relations.
- His object is to buy value.
- His activity is, essentially, coordination.
- His responsibility is on-schedule procurement.
- His challenge is the creation of increased value.
- His work is constant preplanning to accomplish these objectives.

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 37

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*3713—Truck and Bus Bodies		
Crawford, Ohio	3	.8
Wayne, Ind.	2	.7
Los Angeles, Cal.	29	.6
Madison, N. Y.	1	.6
Allen, Ohio	2	.6

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
St. Louis City, Mo.	8	.5
Wayne, Ohio	4	.4
Queens, N. Y.	11	.4
Logan, Ohio	1	.3
Berks, Pa.	5	.3
Marion, Ohio	1	.3
Attala, Miss.	1	.3

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Peach, Ga.	1	.3
Kane, Ill.	2	.3
Essex, N. J.	7	.3
Lawrence, Ind.	1	.2
York, Pa.	1	.2
Allegheny, Pa.	5	.2
Randolph, Ind.	2	.2

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Cuyahoga, Ohio	6	.2
Total Above Counties	93	7.7
Industry Total	564	15.3

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
% of U. S.	16.5	50.3
*3715—Truck Trailers		
Lorain, Ohio	1	1.6
Jackson, Mo.	3	1.2
Los Angeles, Cal.	14	1.0

* Old SIC Code.

©SM, 1959.

Western AVIATION



including **Missile** and **Space Industries**

The Biggest Sales Opportunity!

AT LOW COST

If you sell the aircraft . . . missile-electronics market, you're greatly aware of the density of industry in the 12 states West of the Mississippi River, covered exclusively through this audited publication. The West is the home of the great ICBM's, supersonic aircraft and tremendous jets. Back up your national advertising by concentrating more executive and engineering coverage where the birds are being built.

Write or wire today, our nearest office.

Circulation guarantee

NOW 20,000

ESTABLISHED IN 1925

WESTERN AVIATION MAGAZINE, INC.

Home Office:
101 So. Coronado St.
Los Angeles 57
DUnkirk 1-1341

Represented by:

Edward Spasek
681 Market St.
San Francisco

Mead Irwin
520 Fifth Ave.
New York 36

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 37 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Hamilton, Ohio	2	.9
Hampden, Mass.	1	.6
Allen, Ind.	1	.6
Shelby, Tenn.	3	.6
Philadelphia, Pa.	1	.6
Alameda, Cal.	5	.4
Tarrant, Tex.	3	.3
Rock, Wis.	2	.3
Kane, Ill.	1	.3
Greene, Mo.	1	.3
Kalamazoo, Mich.	1	.3
Coffee, Ala.	1	.3
Chatham, Ga.	1	.3
Cook, Ill.	4	.3
Allen, Ohio	1	.3
Hennepin, Minn.	1	.3
Clay, Mo.	1	.3
Total Above Counties	48	10.8
Industry Total	130	12.9
% of U. S.	36.9	83.7

***3716—Automobile Trailers**

Los Angeles, Cal.	56	1.3
Elkhart, Ind.	24	1.0
Gratiot, Mich.	5	.8
Tulsa, Okla.	1	.6
Sanilac, Mich.	4	.3
Cook, Ill.	13	.3
Marshall, Ind.	4	.2
Cass, Mich.	3	.2
Saginaw, Mich.	4	.2
Wood, Wis.	2	.2
Warren, Miss.	1	.2
Madison, Ind.	2	.2
Lapeer, Mich.	1	.2
Bay, Mich.	2	.2
Iosco, Mich.	1	.2
Livingston, Mich.	1	.2
Branch, Mich.	1	.2
Gogebic, Mich.	1	.2
Oakland, Mich.	1	.2
Tarrant, Tex.	5	.2
Total Above Counties	132	6.9
Industry Total	275	9.0
% of U. S.	48.0	76.7

***3717—Motor Vehicles and Parts**

Wayne, Mich.	122	137.3
Genesee, Mich.	10	49.7
Cuyahoga, Ohio	39	25.1
Oakland, Mich.	21	23.7
Ingham, Mich.	7	16.9
Erie, N. Y.	8	16.5
Los Angeles, Cal.	144	12.2
Marion, Ind.	18	10.1
Macomb, Mich.	18	9.7
Cook, Ill.	100	8.7
St. Joseph, Ind.	3	8.6
Lucas, Ohio	11	8.3
Washtenaw, Mich.	9	7.7
Saginaw, Mich.	8	6.4
Union, N. J.	7	5.9
Kent, Mich.	9	5.6
Kenosha, Wis.	2	5.6
Hamilton, Ohio	10	5.1
Vanderburgh, Ind.	2	5.0
Delaware, Ind.	3	4.6
Total Above Counties	551	372.7
Industry Total	1,226	526.2
% of U. S.	44.9	70.8

***3721—Aircraft**

Los Angeles, Cal.	19	130.4
King, Wash.	2	51.2
San Diego, Cal.	2	47.4
Sedgwick, Kan.	4	33.6
Suffolk, N. Y.	2	21.1
Tarrant, Tex.	2	20.4
Baltimore, Md.	1	18.2
Dallas, Tex.	2	17.3
Franklin, Ohio	1	14.7
Cobb, Ga.	1	14.3
St. Louis, Mo.	1	12.3
Niagara, N. Y.	3	9.7
Nassau, N. Y.	1	8.8
Tulsa, Okla.	1	8.2
Wyandotte, Kan.	1	6.9
Washington, Md.	1	6.5
Jefferson, Ala.	1	5.2
Delaware, Pa.	1	4.2
Pima, Ariz.	1	5.0
Fairfield, Conn.	2	3.9
Total Above Counties	49	439.3
Industry Total	72	442.0
% of U. S.	68.1	99.4

***3722—Aircraft Engines**

Hartford, Conn.	14	28.2
Bergen, N. J.	3	18.4
Cook, Ill.	9	13.4
Hamilton, Ohio	6	13.2
Cuyahoga, Ohio	8	12.4
Marion, Ind.	9	11.3
Fairfield, Conn.	6	5.6
Wayne, Mich.	18	5.4
Los Angeles, Cal.	19	4.6
Jackson, Mo.	1	4.0
New Haven, Conn.	5	3.7
Polk, Iowa	1	2.6
Delaware, Pa.	1	2.5
Essex, Mass.	3	2.4
Philadelphia, Pa.	1	2.2
Middlesex, Mass.	4	2.2
Erie, N. Y.	3	2.1
Oneida, N. Y.	2	2.1
Suffolk, N. Y.	2	2.1
Lycoming, Pa.	1	1.9
Total Above Counties	116	140.3
Industry Total	231	160.5
% of U. S.	50.2	87.4

***3723—Aircraft Propellers**

Hartford, Conn.	2	9.1
Essex, N. J.	1	4.7
Montgomery, Ohio	2	3.2
Arenac, Mich.	1	1.2
Winnebago, Ill.	1	.9
Miami, Ohio	1	.2
Total Above Counties	8	19.3
Industry Total	16	19.6
% of U. S.	50.0	98.5

***3729—Aircraft Equipment, N.E.C.**

Los Angeles, Cal.	449	40.4
St. Joseph, Ind.	4	12.3
Cuyahoga, Ohio	27	10.5
Summit, Ohio	6	10.5
Bucks, Pa.	5	9.0
Wayne, Mich.	22	8.6
Erie, N. Y.	8	7.3
Sacramento, Cal.	1	7.1
San Diego, Cal.	20	6.0
Maricopa, Ariz.	5	5.1
Clay, Mo.	1	4.6
Kent, Mich.	4	3.7
Orange, Fla.	1	2.9
Davidson, Tenn.	1	2.8
Nassau, N. Y.	28	2.7
Essex, Mass.	2	2.7
Broome, N. Y.	1	2.6
Jefferson, N. Y.	1	2.4
Riverside, Cal.	3	2.4
Alameda, Cal.	8	2.3
Total Above Counties	595	145.9
Industry Total	1,082	195.8
% of U. S.	55.0	74.5

***3731—Ship Building and Repairing**

Newport News City, Va.	1	16.8
New London, Conn.	2	10.5
Camden, N. J.	3	8.3
Kings, N. Y.	32	5.6
Baltimore City, Md.	9	5.4
Jackson, Miss.	5	5.1
Norfolk, Mass.	1	5.0
San Francisco, Cal.	10	3.9
Los Angeles, Cal.	10	3.6
Alameda, Cal.	7	3.2
Hudson, N. J.	12	3.1
Jefferson, La.	9	3.0
Orleans, La.	13	2.9
Duval, Fla.	7	2.8
Sagadahoc, Me.	1	2.6
Mobile, Ala.	3	2.5
Baltimore, Md.	1	2.5
Delaware, Pa.	1	2.4
Richmond, N. Y.	7	2.4
King, Wash.	12	2.4
Total Above Counties	146	94.1
Industry Total	355	126.7
% of U. S.	41.1	74.3

* Old SIC Code.

©SM, 1959.

Why the automotive industries are important to you as a powerful integrated market

WHAT ARE THE AUTOMOTIVE INDUSTRIES?

	Annual Product Value
Passenger Cars	$10,847,200,000
Trucks, Buses & Trailers	2,335,244,870
Aircraft, Engines, Parts	11,470,000,000
Construction Equip. & Industrial Trucks	2,346,388,000
Powered Military Equipment	373,000,000
Engines (excluding automotive & aircraft)	676,549,650
Parts & Accessories	3,365,313,257
Tractors & Powered Farm Equipment	2,042,500,000
Total	**$33,456,195,777**

THE LARGEST SINGLE SHARE OF METALWORKING

As a Production Market the Automotive Industries Buy

60% of all the **machine tools**
52% of all the **die castings**
42% of all the **metalworking steel**
41% of all the **cutting fluids**
41% of all the **grinding wheels**
31% of all the **heat treating furnaces**

As a Design Market, Here Are R & D Budgets For One Year In Selected Segments of The Automotive Industries

Passenger Cars	$559,919,000
Aircraft	513,524,000
Agricultural Machinery	17,401,176
Construction Machinery	16,672,500
Engines & Turbines	25,773,320

AN INTEGRATED MARKET THAT READS ITS OWN MAGAZINE

22,928 men with buying power* in 6,841 plants throughout automotive manufacturing read AUTOMOTIVE INDUSTRIES for news of the latest developments and techniques in Automotive Design and Production. To sell automotive men, sell them when they're thinking automotive — when they're reading

*8,117 engineering executives
7,089 production executives
4,490 administrative executives
1,473 purchasing executives
1,759 companys subs

AUTOMOTIVE INDUSTRIES

A CHILTON PUBLICATION

56th and Chestnut Streets • Philadelphia 39, Pennsylvania

ABC ABP

Manufacture of Transportation Equipment—SIC 37—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 37 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*3732—Boat Building and Repairing		
Ottawa, Mich.	4	.6
St. Clair, Mich.	4	.6
Dallas, Tex.	4	.4
San Diego, Cal.	14	.3
Los Angeles, Cal.	35	.3
Fairfield, Conn.	12	.3
Leavenworth, Kan.	1	.3
King, Wash.	28	.3
Bronx, N. Y.	7	.3
Hancock, Me.	11	.3
Essex, Mass.	23	.3
Dade, Fla.	22	.3
Harris, Tex.	17	.3
St. Mary, La.	11	.3
Denton, Tex.	1	.2
Orange, Cal.	20	.2
Suffolk, N. Y.	29	.2
Niagara, N. Y.	1	.2
Barnstable, Mass.	11	.2
Cumberland, N. J.	4	.2
Total Above Counties	259	6.1
Industry Total	1,154	15.6
% of U. S.	22.4	39.1
*3741—Locomotives and Parts		
Cook, Ill.	3	6.4
Erie, Pa.	1	3.7
Delaware, Pa.	1	3.0
Schenectady, N. Y.	2	2.4
Cuyahoga, Ohio	4	1.1
Atchison, Kan.	1	.8
Rock, Wis.	1	.6
Richland, Ohio	1	.4
Coles, Ill.	1	.2
Scott, Iowa	1	.2
Total Above Counties	16	16.9
Industry Total	29	19.0
% of U. S.	55.2	99.5
*3742—Railroad and Street Cars		
Philadelphia, Pa.	1	4.4
Lake, Ind.	4	3.4
Allegheny, Pa.	2	3.1
Cook, Ill.	12	3.0
King, Wash.	1	1.9
Trumbull, Ohio	1	1.6
Jefferson, Ala.	1	1.2
St. Louis City, Mo.	3	1.1
La Porte, Ind.	1	.9
Butler, Pa.	1	.8
Cambria, Pa.	2	.6
Monroe, N. Y.	1	.6
Passaic, N. J.	1	.6
Worcester, Mass.	1	.6
Mercer, Pa.	1	.6
Wayne, Mich.	1	.6
Northumberland, Pa.	1	.6
Mahoning, Ohio	1	.6
Cabell, W. Va.	1	.4
Jefferson, Ill.	1	.4
Total Above Counties	38	26.9
Industry Total	57	27.2
% of U. S.	66.7	98.9
*3751—Motorcycles and Bicycles		
Milwaukee, Wis.	2	.9
Cuyahoga, Ohio	4	.8
Cook, Ill.	5	.8
Hampden, Mass.	1	.7
Lawrence, Tenn.	1	.7
Lancaster, Neb.	1	.3
Mason, Ky.	1	.3
Herkimer, N. Y.	1	.3
Montgomery, Ohio	1	.3
Pulaski, Ark.	1	.3
Kings, N. Y.	6	.2
La Porte, Ind.	1	.2
Erie, N. Y.	2	.2
Queens, N. Y.	1	.2
Worcester, Mass.	1	.2
Lorain, Ohio	1	.2
Total Above Counties	30	6.6
Industry Total	46	6.8
% of U. S.	65.2	97.1
*3799—Transportation Equipment, N. E. C.		
Los Angeles, Cal.	9	.2
Dauphin, Pa.	1	.2
Total Above Counties	10	.4
Industry Total	108	2.0
% of U. S.	9.3	20.0

Manufacture of Instruments & Related Products—SIC 38

Selling to SIC 38 . . .

By J. S. MILLAR,
Chief Buyer
Sperry Gyroscope Co. Division of Sperry Rand Corp.

Since the research and development buyer's product requirements vary widely, he has an interest in almost every salesman who calls.

This interest may not be immediate, but information must be gained and stored for future needs. A great deal of time must be spent locating various manufacturers, their salesmen and/or representatives. That's why the various directories of manufacturers are among the most valuable tools available to a buyer in this field—and sometimes the most exasperating!

Entirely too often a buyer stumbles by pure accident upon the supplier of a long-needed item. This happens not only with small, new companies, but with some of the industrial giants as well. When the salesman located is asked about lack of directory coverage, he is invariably surprised. He points to several listings covering other products and explains the current advertising program. The advertising programs are appreciated and product listings in directories are important, but these listings must be kept up-to-date and product coverage must be complete if the maximum advertising efficiency is to be achieved.

Even the best salesman (and by far the greatest number calling upon us today are excellent salesmen), making the best presentation on the company and its products, will neither completely cover his material nor be completely understood. Appropriate directory-listing of products will, on future occasions, serve as a reminder to the buyer of the salesman's previous visit, and may bring an order. Failure to find the listing may mean that a competitor, who never called, receives the order.

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 38

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*3811—Scientific Instruments		
Bergen, N. J.	8	6.2
Hennepin, Minn.	3	4.4
Queens, N. Y.	8	2.7
Milwaukee, Wis.	1	2.4
Kent, Mich.	1	2.2
Essex, N. J.	10	2.2
Los Angeles, Cal.	48	2.1
Cook, Ill.	28	1.7
Scott, Iowa	1	1.5
Orange, Cal.	2	1.3
Passaic, N. J.	1	1.3
Lackawanna, Pa.	1	1.1
Middlesex, Mass.	11	1.1
Westchester, N. Y.	4	.7
Suffolk, Mass.	4	.7
Durham, N. C.	1	.6
Baltimore, Md.	2	.6
Philadelphia, Pa.	11	.6
New York, N. Y.	12	.5
Harris, Tex.	12	.4
Total Above Counties	169	34.3
Industry Total	370	50.7
% of U. S.	45.7	67.7
*3821—Mechanical Measuring Instruments		
Hennepin, Minn.	3	6.0
Los Angeles, Cal.	49	5.4
Cook, Ill.	46	4.9
Philadelphia, Pa.	17	4.7
Monroe, N. Y.	7	2.9
Fairfield, Conn.	13	2.8
Norfolk, Mass.	8	2.4
Milwaukee, Wis.	7	2.1
Knox, Tenn.	2	2.1
Washtenaw, Mich.	6	1.9
Queens, N. Y.	24	1.8
Cuyahoga, Ohio	17	1.7
Bucks, Pa.	1	1.7
St. Louis City, Mo.	5	1.5
New Haven, Conn.	9	1.3
Bristol, Mass.	2	1.2
Providence, R. I.	2	1.2

* Old SIC Code.

©SM, 1959.

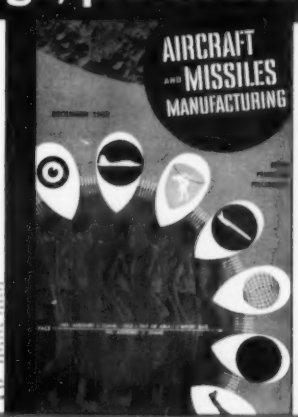
AIRCRAFT AND MISSILES MANUFACTURING

This editorial content sells the design, production





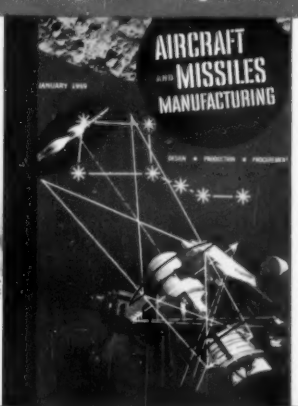


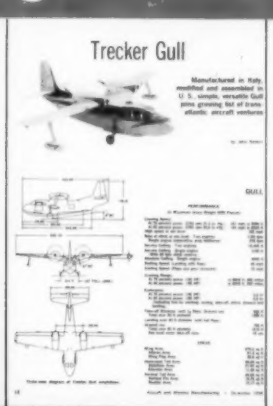


and procurement team in today's expanding $11-billion









aircraft and missiles manufacturing market

AIRCRAFT AND MISSILES MANUFACTURING

This Circulation of 22,941 is aimed exclusively at the design, production and engineering functions of aircraft and missiles manufacturing*

AMM circulation is scientifically controlled

Each carefully screened production engineer, designer and procurement official receives a qualifying questionnaire. He is selected *only* on the basis of his specifying and buying power. (No waste circulation like: students, airline officials, base operation personnel — only potential buyers in design, production and procurement.)

AMM goes to the men you must sell

Design & Engineering	13,386
Production	6,860
Procurement	912
Management	1,471
Company Copies & Librarians	312
TOTAL AMM CIRCULATION	22,941*

AMM goes to the companies you must sell

Aircraft & Missiles	9,147
Power Plants & Propulsion Systems	3,850
Components Parts, & Sub-assemblies	9,129
Government, Military, Research	815
TOTAL AMM CIRCULATION	22,941*

AMM is edited for the men you must reach

In the first year of publishing, the readers of AMM have written and told us: "Thanks for putting all my must reading in one magazine." "... definitely fills a void in trade publications." "... layout, copy style and editorial material seem geared for missile-speed reading."

"Informative coverage over a wide range of manufacture — concise and up to the minute."

See AMM's editorial content for yourself—pick up any issue—read it in its entirety. And, you will agree AMM presents practical, timely design and production information specifically geared to aircraft and missiles manufacturing. It gives the reader all the detailed up-to-the-minute technical information necessary for his function in the industry.

*As of April 1959

PROOF OF EDITORIAL PERFORMANCE

Every week more and more letters are received requesting reprints of editorial features. These letters come from engineers who are working on the realities in aircraft and missiles manufacturing.

Their titles read like your customer list and they say things like:



"The article 'Monitoring Reliability' on pages 26 thru 28 of the December 1958 AIRCRAFT & MISSILES MANUFACTURING is of considerable interest to the Reliability Department, Missile Engineering Division."

(Signed)

Reliability Department Head

"The article entitled 'Monitoring Reliability' appearing in the December 1958 issue of your magazine is very interesting and informative. It was brought to my attention by a friend who thought I might be interested in view of my position as Head of the Reliability Section, Engineering Division. A reprint of the article would be very useful and I would be most appreciative if you would forward a copy to me at your earliest convenience."

(Signed)

Chief, Reliability Section

"Please send a reprint of the article, 'Attaining Reliability', by Karmial, Kimel, and Youtcheff, from the December issue of your magazine. This article will be very helpful in setting up a reliability organization in our unit."

(Signed)

Controls Component Design

In just one typical week we have received 96 requests for editorial reprints. This kind of editorial performance is vitally important to you in the selection of a publication that will reach deep into the design, production and procurement market you must sell in aircraft and missiles manufacturing.

If you sell a product or service for use in this $11-billion market your most direct and economical means of getting inside aircraft and missiles manufacturing is in

AIRCRAFT AND MISSILES MANUFACTURING

BPA ABP Chestnut & 56th Streets, Philadelphia 39, Pa. Tel: SHerwood 8-2000 A Chilton Publication

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 38 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Winnebago, Ill.	1	1.2
Westmoreland, Pa.	1	1.2
Franklin, Ohio	6	1.1
Total Above Counties	228	49.1
Industry Total	607	70.5
% of U. S.	37.2	69.6

***3831—Optical Instruments and Lenses**

Monroe, N. Y.	12	5.4
Erie, N. Y.	1	1.3
Cook, Ill.	16	1.0
Orange, Cal.	1	1.0
Bronx, N. Y.	4	.7
Los Angeles, Cal.	28	.6
Fairfield, Conn.	3	.4
Hampshire, Mass.	1	.4
Middlesex, Mass.	8	.3
Nassau, N. Y.	7	.3
Cabell, W. Va.	2	.2
Cheshire, N. H.	1	.2
El Paso, Tex.	1	.2
Hamilton, Ohio	2	.2
New York, N. Y.	14	.1
Allegheny, Pa.	2	.1
Westchester, N. Y.	6	.1
Suffolk, Mass.	5	.1
Total Above Counties	114	12.6
Industry Total	205	13.0
% of U. S.	55.6	96.9

***3841—Surgical and Medical Instruments**

Bergen, N. J.	6	2.1
Fairfield, Conn.	8	.6
Queens, N. Y.	10	.4
Davidson, Tenn.	1	.4
Santa Clara, Cal.	1	.3
New York, N. Y.	13	.2
Erie, N. Y.	3	.2
Cook, Ill.	15	.2
Norfolk, Mass.	4	.2
Kosciusko, Ind.	1	.2
Platte, Neb.	1	.2
New Haven, Conn.	2	.2
Philadelphia, Pa.	9	.2
Onondaga, N. Y.	2	.2
Los Angeles, Cal.	16	.2
Suffolk, Mass.	7	.1
Kings, N. Y.	11	.1
Total Above Counties	110	6.0
Industry Total	210	7.3
% of U. S.	52.4	82.2

***3842—Surgical Appliances and Supplies**

Cook, Ill.	50	3.9
Middlesex, N. J.	3	3.4
Allegheny, Pa.	7	1.0
Fairfield, Conn.	5	.9
Erie, Pa.	3	.8
New York, N. Y.	50	.8
Dane, Wis.	3	.7
New Haven, Conn.	2	.7
Niagara, N. Y.	1	.7
Los Angeles, Cal.	41	.7
Philadelphia, Pa.	23	.5
Cuyahoga, Ohio	14	.5
Kings, N. Y.	13	.4
Winnebago, Ill.	2	.4
Jackson, Mich.	2	.4
Highland, Ohio	1	.4
Hampden, Mass.	1	.4
Queens, N. Y.	9	.4
Monroe, N. Y.	4	.4
Hamilton, Ohio	7	.3
Total Above Counties	241	17.7
Industry Total	654	24.7
% of U. S.	36.9	71.7

***3843—Dental Equipment and Supplies**

Monroe, N. Y.	2	.9
Philadelphia, Pa.	18	.9
Cook, Ill.	23	.6
Richmond, N. Y.	1	.5
York, Pa.	1	.5
New York, N. Y.	21	.4
Sussex, Del.	1	.3
Stark, Ohio	1	.3
Wayne, Mich.	4	.2
Middlesex, Mass.	3	.2
Alleghany, Va.	1	.2
Franklin, Ohio	1	.2
Erie, N. Y.	3	.1
Denver, Col.	6	.1
Los Angeles, Cal.	13	.1
Total Above Counties	99	5.5
Industry Total	195	6.0
% of U. S.	50.8	91.7

***3851—Ophthalmic Goods**

Monroe, N. Y.	8	5.9
Worcester, Mass.	4	3.2
New York, N. Y.	54	1.2
Providence, R. I.	14	.9
Petersburg City, Va.	2	.9
Queens, N. Y.	12	.7
Berks, Pa.	2	.7
Kings, N. Y.	11	.6
Essex, N. J.	9	.4
Jackson, Me.	3	.3
Dallas, Tex.	6	.3
Suffolk, Mass.	4	.3
Bristol, Mass.	3	.2
Cook, Ill.	11	.2
Bergen, N. J.	4	.2
Dade, Fla.	4	.2
Harris, Tex.	1	.2
Marion, Ind.	3	.2
Ontario, N. Y.	1	.2
Cuyahoga, Ohio	4	.2
Total Above Counties	159	16.9
Industry Total	238	17.8
% of U. S.	66.8	94.9

***3861—Photographic Equipment and Supplies**

Monroe, N. Y.	15	28.4
Cook, Ill.	74	7.6
Broome, N. Y.	5	5.2
Nassau, N. Y.	7	1.9
Middlesex, N. J.	1	1.6
Los Angeles, Cal.	70	1.3
Queens, N. Y.	20	1.2
Washtenaw, Mich.	2	1.1
Middlesex, Mass.	1	1.1
Kings, N. Y.	13	1.0
Essex, N. J.	7	.9
Suffolk, Mass.	5	.7
New York, N. Y.	48	.7
Hudson, N. J.	2	.7
Santa Clara, Cal.	1	.7
Denver, Col.	5	.5
Wayne, Mich.	11	.5
Milwaukee, Wis.	6	.4
Hennepin, Minn.	3	.4
Bergen, N. J.	6	.3
Total Above Counties	304	56.2
Industry Total	449	57.8
% of U. S.	67.7	97.2

***3871—Watches and Clocks**

La Salle, Ill.	1	2.7
Hartford, Conn.	4	2.2
Kane, Ill.	2	2.1
New Haven, Conn.	5	2.1
Lancaster, Pa.	2	1.9
New York, N. Y.	52	1.1
Litchfield, Conn.	3	1.0
Middlesex, Mass.	6	1.0
Queens, N. Y.	4	1.0
Taylor, Tex.	1	.8
Cook, Ill.	12	.7
Worcester, Mass.	1	.5
Walworth, Wis.	1	.5
Pulaski, Ark.	1	.5
Kings, N. Y.	8	.3
Hamilton, Ohio	1	.3
Bureau, Ill.	1	.3
Hampden, Mass.	1	.3
Essex, N. J.	3	.2
Hudson, N. J.	1	.2
Total Above Counties	110	19.7
Industry Total	145	19.8
% of U. S.	75.9	99.5

***3872—Watchcases**

New York, N. Y.	37	.6
Campbell, Ky.	1	.6
New Haven, Conn.	3	.5
Mason, Mich.	1	.4
Queens, N. Y.	7	.2
Burlington, N. J.	1	.2
Suffolk, N. Y.	1	.2
Fairfield, Conn.	2	.1
Kings, N. Y.	4	.1
Total Above Counties	57	2.9
Industry Total	64	3.0
% of U. S.	89.1	96.7

Miscellaneous Manufactures—SIC 39

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 39

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
***3911—Jewelry**		
New York, N. Y.	633	5.3
Providence, R. I.	130	4.1
Bristol, Mass.	41	2.0
Essex, N. J.	65	1.4
Hudson, N. J.	4	.5
Monroe, N. Y.	3	.5
Cook, Ill.	47	.5
Los Angeles, Cal.	60	.5
Union, N. J.	4	.4
Marion, Ind.	8	.4
Steele, Minn.	1	.3
Hamilton, Ohio	28	.3
Queens, N. Y.	9	.3
Wayne, Mich.	14	.3
Philadelphia, Pa.	28	.2
Erie, N. Y.	13	.2
Kings, N. Y.	8	.2
Bernalillo, N. M.	3	.2
San Francisco, Cal.	21	.2
Harris, Tex.	4	.2
Total Above Counties	1,122	16.0
Industry Total	1,321	19.0
% of U. S.	84.9	94.7
***3912—Jewelers' Findings**		
Providence, R. I.	136	2.2
Bristol, Mass.	19	1.0
New York, N. Y.	34	.3
Essex, N. J.	16	.2
Westchester, N. Y.	1	.2
Total Above Counties	206	3.9
Industry Total	234	4.1
% of U. S.	88.0	95.1
***3913—Lapidary Work**		
New York, N. Y.	223	1.0
Providence, R. I.	13	.1
Middlesex, N. J.	1	.1
Total Above Counties	237	1.2
Industry Total	333	1.7
% of U. S.	71.2	70.6
***3914—Silverware and Plated Ware**		
New Haven, Conn.	20	3.8
Oneida, N. Y.	1	2.8
Bristol, Mass.	22	1.6
Providence, R. I.	6	1.0
New York, N. Y.	42	.6
Cook, Ill.	10	.6
Essex, Mass.	2	.5
Kings, N. Y.	21	.5
Essex, N. J.	13	.5
Delaware, Ind.	1	.3
Queens, N. Y.	5	.3
Los Angeles, Cal.	10	.2
Baltimore City, Md.	4	.2
Guernsey, Ohio	1	.2

* Old SIC Code.

©SM, 1959.

Miscellaneous Manufactures—SIC 39—(Cont'd)

SM Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 39 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
Norfolk, Va.	1	.2
Howard, Ind.	1	.2
Franklin, Mass.	1	.2
Orange, N. Y.	1	.2
Total Above Counties	162	13.9
Industry Total	207	14.1
% of U. S.	78.3	98.6
*3931—Pianos		
Hamilton, Ohio	1	1.5
Cook, Ill.	3	.8
De Kalb, Ill.	1	.7
Bronx, N. Y.	4	.5
Queens, N. Y.	2	.4
Monroe, N. Y.	1	.4
Delaware, Pa.	1	.4
Van Buren, Mich.	1	.4
New York, N. Y.	4	.3
Ottawa, Mich.	2	.2
Total Above Counties	20	5.6
Industry Total	27	5.8
% of U. S.	74.1	96.6
*3932—Organs		
Washington, Md.	1	.3
Cook, Ill.	4	.2
Windham, Vt.	1	.2
Elkhart, Ind.	1	.2
Suffolk, Mass.	1	.2
Madison, Ill.	1	.2
Lehigh, Pa.	1	.2
Total Above Counties	10	1.5
Industry Total	31	2.0
% of U. S.	32.3	75.0
*3933—Piano and Organ Parts		
Cook, Ill.	5	.8
Middlesex, Conn.	1	.6
Winnebago, Ill.	1	.4
Clark, Ohio	2	.2
Grays Harbor, Wash.	1	.2
Erie, N. Y.	1	.2
Racine, Wis.	1	.2
Shelby, Tenn.	2	.2
Total Above Counties	14	2.8
Industry Total	40	3.0
% of U. S.	35.0	93.3
*3939—Musical Instruments, N.E.C.		
Elkhart, Ind.	17	1.4
Cook, Ill.	25	.7
Kent, Mich.	1	.6
Cuyahoga, Ohio	4	.4
Walworth, Wis.	2	.2
Orange, Cal.	2	.2
New York, N. Y.	17	.2
Windham, Vt.	1	.2
Butler, Ohio	1	.2
Kalamazoo, Mich.	2	.2
Suffolk, Mass.	8	.1
Los Angeles, Cal.	9	.1
Total Above Counties	99	3.9
Industry Total	144	4.8
% of U. S.	61.8	81.3
*3941—Games and Toys, N.E.C.		
Essex, N. J.	16	2.8
Kings, N. Y.	87	2.7
New Haven, Conn.	7	1.8
New York, N. Y.	97	1.7
Los Angeles, Cal.	71	1.6
Marshall, W. Va.	1	1.5
Cook, Ill.	51	1.4
Erie, Pa.	4	1.3
Queens, N. Y.	22	1.2
Worcester, Mass.	15	1.2
Bronx, N. Y.	23	.9
Hampden, Mass.	6	.9
Lancaster, Pa.	4	.7
Providence, R. I.	8	.7
Hillsborough, N. H.	2	.7
Wayne, Mich.	13	.7
St. Louis City, Mo.	11	.5
Westchester, N. Y.	14	.5
Allegheny, Pa.	4	.5
Montgomery, Pa.	7	.5
Total Above Counties	463	23.8
Industry Total	886	37.4
% of U. S.	52.3	63.6
*3942—Dolls		
New York, N. Y.	193	4.6
Kings, N. Y.	102	3.1
Queens, N. Y.	22	1.9
Mercer, N. J.	2	.4
Passaic, N. J.	3	.4
Hudson, N. J.	4	.4
Fulton, Ga.	1	.4
Philadelphia, Pa.	6	.4
Westchester, N. Y.	4	.3
Bronx, N. Y.	20	.3
Hampden, Mass.	2	.2
Northampton, Pa.	1	.2
Worcester, Mass.	6	.2
Middlesex, Mass.	2	.2
Nassau, N. Y.	4	.2
Los Angeles, Cal.	14	.2
San Francisco, Cal.	3	.2
Total Above Counties	389	13.6
Industry Total	483	14.8
% of U. S.	80.5	91.9
*3943—Children's Vehicles		
Worcester, Mass.	11	1.0
Cuyahoga, Ohio	1	.9
Lake, Ind.	1	.6
Cook, Ill.	2	.4
St. Louis City, Mo.	2	.4
Sheboygan, Wis.	1	.4
Los Angeles, Cal.	6	.4
Hamilton, Ohio	1	.4
Philadelphia, Pa.	2	.3
Kings, N. Y.	3	.2
Bronx, N. Y.	7	.2
Noble, Ind.	1	.2
Broome, N. Y.	1	.2
La Porte, Ind.	1	.2
Houston, Ala.	1	.2
Total Above Counties	41	6.0
Industry Total	61	6.0
% of U. S.	67.2	100.0
*3949—Sporting and Athletic Goods		
Muskegon, Mich.	3	2.1
Cook, Ill.	53	1.6
Hamilton, Ohio	11	1.6
Anderson, S. C.	1	1.5
Hampden, Mass.	4	1.4
Los Angeles, Cal.	83	1.2
St. Louis City, Mo.	11	1.1
Philadelphia, Pa.	11	.9
Kalamazoo, Mich.	1	.8
Litchfield, Conn.	3	.7
Denver, Col.	12	.6
Essex, N. J.	8	.6
Jefferson, Ark.	1	.6
Summit, Ohio	9	.5
Coffee, Tenn.	4	.4
Bristol, Mass.	2	.4
Lawrence, Ohio	1	.4
Ashland, Ohio	1	.4
Ashtabula, Ohio	1	.4
Cass, Mich.	2	.4
Total Above Counties	222	17.6
Industry Total	1,027	29.1
% of U. S.	21.6	60.5
*3951—Pens and Mechanical Pencils		
Rock, Wis.	1	1.5
Lee, Iowa	2	1.5
New York, N. Y.	35	1.0
Cook, Ill.	6	1.0
Hudson, N. J.	7	.9
Los Angeles, Cal.	17	.9
Fulton, Ga.	1	.7
Camden, N. J.	2	.7
Dunn, Wis.	1	.4
St. Louis, Mo.	1	.4
Bergen, N. J.	4	.3
St. Louis City, Mo.	5	.2
Fairfield, Conn.	1	.2
Henry, Iowa	1	.2
Charlotte City, Va.	1	.2
Providence, R. I.	9	.2
New Haven, Conn.	2	.2
Nassau, N. Y.	2	.2
Kings, N. Y.	5	.1
Total Above Counties	103	10.8
Industry Total	140	11.5
% of U. S.	73.6	93.9
*3952—Lead Pencils and Crayons		
New York, N. Y.	5	.7
Hudson, N. J.	3	.7
Fairfield, Conn.	1	.5
Kings, N. Y.	5	.5
Bedford, Tenn.	7	.5
Marshall, Tenn.	2	.4
Erie, Ohio	1	.4
Northampton, Pa.	2	.4
Fulton, Ga.	1	.2
Scott, Ky.	1	.2
Luzerne, Pa.	1	.2
Total Above Counties	29	4.7
Industry Total	60	5.2
% of U. S.	48.3	90.4
*3953—Hand Stamps and Stencils		
Cook, Ill.	38	1.0
Philadelphia, Pa.	17	.5
Allegheny, Pa.	9	.5
New York, N. Y.	40	.4
Los Angeles, Cal.	23	.3
Westchester, N. Y.	2	.2
Middlesex, Conn.	1	.2
Rockland, N. Y.	1	.2
Wayne, Mich.	10	.1
Cuyahoga, Ohio	9	.1
San Francisco, Cal.	10	.1
Total Above Counties	160	3.6
Industry Total	456	6.2
% of U. S.	35.1	58.1
*3954—Artists' Materials		
Essex, N. J.	3	.4
Kings, N. Y.	10	.3
New York, N. Y.	24	.2
Cuyahoga, Ohio	2	.2
Marion, Ind.	1	.2
Philadelphia, Pa.	1	.1
Total Above Counties	41	1.4
Industry Total	92	2.0
% of U. S.	44.6	70.0
*3955—Carbon Paper and Inked Ribbons		
Kings, N. Y.	7	.7
Monroe, N. Y.	7	.5
Bergen, N. J.	1	.5
Nassau, N. Y.	2	.5
Cook, Ill.	8	.4
New York, N. Y.	9	.2
Fairfield, Conn.	2	.2
Allegheny, Pa.	1	.2
Cuyahoga, Ohio	3	.2
Polk, Iowa	1	.2
Ellis, Tex.	3	.2
Essex, N. J.	2	.2
St. Clair, Mich.	1	.2
Kane, Ill.	1	.2
Burlington, N. J.	1	.2
Hartford, Conn.	1	.2
Middlesex, Mass.	1	.2
Los Angeles, Cal.	6	.2
Denver, Col.	2	.1
Total Above Counties	59	5.3
Industry Total	84	5.3
% of U. S.	70.2	100.0
*3961—Costume Jewelry		
Providence, R. I.	364	10.4
New York, N. Y.	425	6.6
Bristol, Mass.	32	2.9
Queens, N. Y.	28	1.8
Kings, N. Y.	38	1.2
Los Angeles, Cal.	29	.4
Cook, Ill.	18	.4
Westchester, N. Y.	9	.3
New Haven, Conn.	5	.2
Bronx, N. Y.	21	.2
Middlesex, N. J.	2	.2
Essex, N. J.	12	.2
Hudson, N. J.	8	.2
Dallas, Tex.	6	.1
Total Above Counties	1,017	24.9
Industry Total	1,127	25.5
% of U. S.	90.2	97.6
*3962—Artificial Flowers		
New York, N. Y.	210	2.7
Providence, R. I.	5	.4
Philadelphia, Pa.	11	.4
Kings, N. Y.	44	.3
Cook, Ill.	22	.3
Bronx, N. Y.	18	.2
Bradford, Pa.	3	.2
La Porte, Ind.	1	.2
Brown, Tex.	1	.2
Westchester, N. Y.	4	.1
Hudson, N. J.	8	.1
Richmond, N. Y.	3	.1
Total Above Counties	330	5.2
Industry Total	472	6.5
% of U. S.	69.9	80.0
*3963—Buttons		
New York, N. Y.	226	2.6
Muscatine, Iowa	10	.8
Cook, Ill.	14	.4
Monroe, N. Y.	3	.3
Hudson, N. J.	13	.3
Queens, N. Y.	11	.2
Tolland, Conn.	3	.2
Caroline, Md.	3	.2
Knox, Tenn.	1	.2
Washington, Iowa	1	.1
Windham, Conn.	1	.1
Allamakee, Iowa	1	.1
Hardin, Tenn.	1	.1
Bergen, N. J.	8	.1
Nassau, N. Y.	3	.1
Philadelphia, Pa.	4	.1
Sussex, Del.	13	.1
Kings, N. Y.	6	.1
Essex, N. J.	5	.1
Total Above Counties	327	6.2
Industry Total	410	7.3
% of U. S.	79.8	84.9

* Old SIC Code.

©SM, 1959.

Estimates for 4-Digit Employment (Old Code), Leading Counties, SIC 39 (Cont'd)

COUNTY and STATE	No. of Plants	SM Employment (thou.) 1958
*3964—Needles, Pins and Fasteners		
New Haven, Conn.	19	4.6
New York, N. Y.	176	2.6
Crawford, Pa.	1	2.6
Litchfield, Conn.	3	1.8
Queens, N. Y.	12	1.3
Essex, N. J.	8	1.2
Hartford, Conn.	4	1.0
Providence, R. I.	7	.7
Cook, Ill.	9	.5
Kings, N. Y.	26	.4
Warwick, Va.	1	.4
Douglas, Neb.	1	.4
Nassau, N. Y.	5	.4
Bristol, R. I.	1	.4
Fairfield, Conn.	4	.3
Shelby, Ill.	1	.2
Outagamie, Wis.	1	.2
Middlesex, N. J.	2	.2
Bristol, Mass.	2	.2
Windham, Conn.	2	.2
Total Above Counties	285	19.6
Industry Total	357	21.3
% of U. S.	79.8	92.0
*3971—Plastics Products, N.E.C.		
Cook, Ill.	200	11.6
Los Angeles, Cal.	236	6.0
Worcester, Mass.	55	4.9
New York, N. Y.	179	3.0
Kings, N. Y.	101	2.6
Montgomery, Pa.	11	2.6
Lackawanna, Pa.	8	2.2
Queens, N. Y.	58	2.0
Middlesex, Mass.	26	2.0
Essex, N. J.	52	1.6
Providence, R. I.	29	1.5
Hampshire, Mass.	5	1.5
Nassau, N. Y.	28	1.4
Fairfield, Conn.	33	1.4
Erie, N. Y.	16	1.4
Hamilton, Ohio	17	1.4
New Haven, Conn.	19	1.2
Union, N. J.	33	1.2
New Castle, Del.	7	1.2
Bronx, N. Y.	36	1.1
Total Above Counties	1,152	51.8
Industry Total	2,439	108.4
% of U. S.	47.2	47.8
*3981—Brooms and Brushes		
New York, N. Y.	46	1.5
Baltimore City, Md.	10	.9
Cuyahoga, Ohio	18	.7
Essex, N. J.	12	.7
Hartford, Conn.	6	.7
Cook, Ill.	29	.6
Lucas, Ohio	2	.4
Suffolk, Mass.	5	.4
Kings, N. Y.	24	.4
Hampshire, Mass.	1	.4
Westchester, N. Y.	4	.4
Frederick, Md.	2	.4
Los Angeles, Cal.	23	.4
Philadelphia, Pa.	18	.3
St. Louis City, Mo.	6	.3
Milwaukee, Wis.	8	.3
Kane, Ill.	3	.3
Hampden, Mass.	5	.2
Wayne, Ohio	1	.2
Edgar, Ill.	1	.2
Total Above Counties	224	9.7
Industry Total	697	16.8
% of U. S.	32.1	57.7
*3982—Cork Products		
Allegheny, Pa.	1	.6
Beaver, Pa.	1	.4
Union, N. J.	1	.3
Kings, N. Y.	7	.2
Hudson, N. J.	3	.1
Monmouth, N. J.	1	.1
Lancaster, Pa.	1	.1
Total Above Counties	15	1.8
Industry Total	35	1.9
% of U. S.	42.9	94.7
*3983—Matches		
Hampden, Mass.	1	.8
Cook, Ill.	2	.8
Carlton, Minn.	1	.8
Queens, N. Y.	1	.8
Columbia, N. Y.	1	.4
Winnebago, Wis.	1	.4
St. Louis City, Mo.	2	.4
Summit, Ohio	1	.4
Cheshire, N. H.	1	.2
Pierce, Wash.	1	.2
Butte, Cal.	1	.2
Jeffersen, La.	1	.1
Total Above Counties	14	5.5
Industry Total	20	6.0
% of U. S.	70.0	91.7
*3984—Candles		
Onondaga, N. Y.	5	.9
Erie, N. Y.	2	.4
Queens, N. Y.	6	.3
Winnebago, Wis.	2	.2
Medina, Pa.	1	.2
Kings, N. Y.	10	.1
Philadelphia, Pa.	1	.1
Los Angeles, Cal.	13	.1
Total Above Counties	40	2.3
Industry Total	89	3.0
% of U. S.	44.9	76.7
*3985—Fireworks & Pyrotechnics		
Cecil, Md.	8	.8
Los Angeles, Cal.	6	.6
Montgomery, Ohio	1	.2
New Haven, Conn.	1	.2
Cumberland, N. J.	2	.1
Tarrant, Tex.	4	.1
Total Above Counties	22	2.0
Industry Total	78	3.1
% of U. S.	28.2	64.5
*3988—Jewelry and Instrument		
Suffolk, Mass.	6	1.2
Queens, N. Y.	8	.6
Providence, R. I.	15	.6
New York, N. Y.	44	.6
Fairfield, Conn.	4	.5
Kane, Ill.	1	.5
Hudson, N. J.	6	.4
Erie, N. Y.	4	.2
Cook, Ill.	10	.2
Bristol, Mass.	3	.2
Kings, N. Y.	13	.2
Orange, N. Y.	1	.2
Union, N. J.	1	.2
Rapides, La.	1	.2
New Haven, Conn.	2	.2
Fulton, Ohio	1	.2
Cortland, N. Y.	1	.2
Essex, N. J.	2	.1
Total Above Counties	123	6.5
Industry Total	161	6.6
% of U. S.	76.4	98.5
*3987—Lamp Shades		
Cook, Ill.	37	1.1
New York, N. Y.	106	1.0
Philadelphia, Pa.	24	.6
Kings, N. Y.	24	.3
Los Angeles, Cal.	24	.3
Passaic, N. J.	7	.2
Bronx, N. Y.	8	.2
Bergen, N. J.	2	.2
Middlesex, Conn.	1	.2
Westchester, N. Y.	1	.2
Lackawanna, Pa.	3	.1
Total Above Counties	237	4.4
Industry Total	311	5.1
% of U. S.	76.2	86.3
*3988—Morticians' Goods		
Cook, Ill.	38	1.3
Ripley, Ind.	1	.7
Berks, Pa.	1	.6
Fulton, Ga.	6	.6
Los Angeles, Cal.	21	.5
Clark, Ohio	3	.5
Wayne, Ind.	14	.5
Franklin, Ohio	7	.4
Allegheny, Pa.	3	.4
York, Pa.	1	.4
Hamilton, Ohio	4	.4
St. Louis City, Mo.	10	.3
Lackawanna, Pa.	4	.3
Queens, N. Y.	7	.3
Cuyahoga, Ohio	10	.2
Middlesex, Mass.	2	.2
Philadelphia, Pa.	14	.2
Wayne, Mich.	12	.2
Dearborn, Ind.	1	.2
Fayette, Ind.	2	.2
Total Above Counties	161	8.4
Industry Total	565	17.1
% of U. S.	28.5	49.1
*3991—Beauty and Barber-Shop Equipment		
St. Louis City, Mo.	3	.4
Racine, Wis.	2	.3
Cook, Ill.	10	.2
Lycoming, Pa.	1	.2
Kings, N. Y.	6	.2
Whiteside, Ill.	1	.2
Los Angeles, Cal.	10	.1
Total Above Counties	33	1.6
Industry Total	67	2.1
% of U. S.	49.3	76.2
*3992—Furs, Dressed and Dyed		
New York, N. Y.	87	.8
Kings, N. Y.	18	.7
Hudson, N. J.	4	.4
Essex, N. J.	6	.4
Bronx, N. Y.	4	.1
St. Louis City, Mo.	1	.1
Orange, N. Y.	1	.1
Westchester, N. Y.	2	.1
Total Above Counties	123	2.7
Industry Total	160	2.7
% of U. S.	76.9	100.0
*3993—Signs and Advertising Displays		
Cook, Ill.	154	3.5
New York, N. Y.	212	2.7
Los Angeles, Cal.	126	1.9
Kings, N. Y.	57	1.0
Queens, N. Y.	40	.9
Hamilton, Ohio	28	.8
Philadelphia, Pa.	61	.8
Milwaukee, Wis.	32	.7
Wayne, Mich.	47	.7
Cuyahoga, Ohio	47	.7
Dallas, Tex.	21	.7
Hennepin, Minn.	34	.6
St. Louis City, Mo.	29	.6
Alameda, Cal.	16	.5
Hudson, N. J.	16	.5
Suffolk, Mass.	23	.4
Allegheny, Pa.	25	.4
Essex, N. J.	26	.4
Allen, Ohio	2	.4
Stark, Ohio	7	.4
Total Above Counties	1,003	16.6
Industry Total	2,620	34.6
% of U. S.	38.3	53.8
*3994—Hairwork		
New York, N. Y.	60	1.1
Kings, N. Y.	14	.3
Philadelphia, Pa.	7	.3
Total Above Counties	81	1.7
Industry Total	133	2.1
% of U. S.	60.9	81.0
*3995—Umbrellas, Parasols, and Canes		
New York, N. Y.	69	.7
Lancaster, Pa.	5	.4
Essex, N. J.	5	.3
Philadelphia, Pa.	3	.3
Baltimore City, Md.	5	.3
Kings, N. Y.	19	.2
Bronx, N. Y.	5	.2
Total Above Counties	111	2.4
Industry Total	136	3.0
% of U. S.	81.6	80.0
*3996—Tobacco Pipes		
Hudson, N. J.	4	.5
Queens, N. Y.	3	.5
Kings, N. Y.	10	.3
Merrimac, N. H.	1	.3
Alleghany, N. C.	1	.1
New York, N. Y.	11	.1
Franklin, Mo.	2	.1
Total Above Counties	32	1.9
Industry Total	43	2.0
% of U. S.	74.4	95.0
*3997—Soda Fountain and Bar Equipment		
Ottawa, Mich.	1	.4
Milwaukee, Wis.	2	.2
Bronx, N. Y.	5	.1
Bergen, N. J.	2	.1
Total Above Counties	10	.8
Industry Total	50	.9
% of U. S.	20.0	88.9
*3999—Miscellaneous Products, N.E.C.		
Essex, N. J.	18	3.3
New York, N. Y.	186	2.2
Los Angeles, Cal.	73	1.8
Kings, N. Y.	49	1.2
Cook, Ill.	50	1.2
Monroe, N. Y.	10	.7
Marinette, Wis.	1	.6
Monroe, Pa.	1	.6
Bristol, Mass.	6	.5
Providence, R. I.	13	.5
Hamilton, Ohio	8	.5
McKean, Pa.	1	.4
Montgomery, Ohio	1	.4
St. Louis City, Mo.	11	.3
Middlesex, Mass.	8	.3
Wayne, Mich.	13	.3
Milwaukee, Wis.	15	.3
Branch, Mich.	1	.2
Hartford, Conn.	4	.2
Chittenden, Vt.	1	.2
Total Above Counties	472	15.7
Industry Total	891	20.8
% of U. S.	53.0	75.5

* Old SIC Code.

©SM, 1959.

Total Manufactures Employment, Leading Counties

SM Estimates for 100 Leading Counties with 62.6% of 1958 Employment

COUNTY and STATE	EMPLOYMENT SM Estimates 1st Quarter, 1958	COUNTY and STATE	EMPLOYMENT SM Estimates 1st Quarter, 1958	COUNTY and STATE	EMPLOYMENT SM Estimates 1st Quarter, 1958	COUNTY and STATE	EMPLOYMENT SM Estimates 1st Quarter, 1958	COUNTY and STATE	EMPLOYMENT SM Estimates 1st Quarter, 1958
New York, N. Y.	918,247	Worcester, Mass.	94,410	Passaic, N. J.	68,486	Beaver, Pa.	45,170	Mercer, N. J.	35,356
Cook, Ill.	911,629	Lake, Ind.	94,069	Jackson, Mo.	65,857	Ramsey, Minn.	44,930	Lehigh, Pa.	35,305
Los Angeles, Cal.	684,486	Suffolk, Mass.	93,922	Alameda, Cal.	65,517	Madison, Ill.	44,496	Hamilton, Tenn.	34,918
Wayne, Mich.	378,902	Montgomery, Ohio	92,983	Jefferson, Ala.	65,057	Delaware, Pa.	44,417	Erie, Pa.	34,860
Philadelphia, Pa.	296,450	Providence, R. I.	92,958	Montgomery, Pa.	64,516	Kent, Mich.	43,798	Norfolk, Mass.	34,774
Cuyahoga, Ohio	265,930	Harris, Tex.	88,140	Hampden, Mass.	60,570	Lancaster, Pa.	43,201	Trumbull, Ohio	34,530
Allegheny, Pa.	192,234	Jefferson, Ky.	85,855	Middlesex, N. J.	59,274	Guilford, N. C.	42,327		
Milwaukee, Wis.	171,343	Dallas, Tex.	85,509	Fulton, Ga.	58,278			Kane, Ill.	34,373
St. Louis City, Mo.	154,520	Essex, Mass.	84,505			Denver, Col.	42,206	Schenectady, N. Y.	32,635
Hamilton, Ohio	140,051			Lucas, Ohio	55,681	Winnebago, Ill.	41,530	*Henrico, Va.	32,288
		Summit, Ohio	82,639	Westchester, N. Y.	55,418	St. Louis, Mo.	40,006	Forsyth, N. C.	31,986
Middlesex, Mass.	134,183	Bergen, N. J.	81,224	Onondaga, N. Y.	53,646	York, Pa.	39,393	Orleans, La.	31,422
Erie, N. Y.	122,787	Wood, Wis.	79,656	Niagara, N. Y.	53,325	Mahoning, Ohio	40,537	Allen, Ind.	31,413
Essex, N. J.	121,322	Union, N. J.	79,612	Stark, Ohio	52,460	Shelby, Tenn.	40,463	Dade, Fla.	30,736
Hudson, N. J.	121,195	Hennepin, Minn.	74,508	Sedgwick, Kan.	50,881	Camden, N. J.	39,857	Greenville, S. C.	30,152
Hartford, Conn.	110,069	Bristol, Mass.	74,339	Tarrant, Tex.	50,619	Multnomah, Ore.	38,776	Hillsborough, N. H.	29,934
Baltimore City, Md.	107,896	Baltimore, Md.	72,093	Tazewell, Ill.	50,538	Broome, N. Y.	38,517	Douglas, Neb.	29,476
King, Wash.	102,966	San Diego, Cal.	70,717	Oakland, Mich.	48,229	Macomb, Mich.	37,487		
New Haven, Conn.	101,827	Nassau, N. Y.	69,323	New Castle, Del.	48,115			Total Above Counties	9,584,069
Monroe, N. Y.	101,404	Franklin, Ohio	68,639			Luzerne, Pa.	36,281		
Fairfield, Conn.	100,550			Berks, Pa.	47,887	Westmoreland, Pa.	35,795	Industry Total	15,309,052
		Genesee, Mich.	68,572	Northampton, Pa.	47,528	St. Joseph, Ind.	35,703		
Marion, Ind.	95,428	San Francisco, Cal.	68,569	Santa Clara, Cal.	47,407	Davidson, Tenn.	35,361	% of U. S.	62.6

† Includes Richmond City.

Mining Employment, Leading Counties

Selling to the Mining Industry

By D. T. KELIHER,
Purchasing Agent
United States Metals Refining Co., Sub. of American Metal Climax, Inc.

If we assume that a good salesman has adequate knowledge of his product, and that he is thoroughly versed in his product's application to our operations, then eight out of ten salesmen calling upon us today would rate as "good."

But supplier companies can improve their service to the mining industry by keeping closer watch on orders placed by the customer.

Mining companies, due to the nature of the business, require heavy capital investments in machinery. In order to operate this equipment, they must maintain heavy inventories. In many cases long lead-times are necessary for the fabricated items which go into any particular operation . . . for example, gears on ball mills, gyratory crushers, flotation equipment, conveyors and underground mine cars.

Today these inventories are being watched closely and in some cases the number of units carried in stock is not as large as it was years ago. This means deliveries are extremely important. The salesman's responsibility cannot end when he books the order. It should be his responsibility to see that delivery schedules are met.

SM Estimates for 100 Leading Counties with 55% of 1958 Employment

COUNTY and STATE	EMPLOYMENT SM ESTIMATE Total Mining	Metal Mining	Anthracite, Bituminous Coal and Lignite Mining	Crude Petroleum Natural Gas Extraction	Non-Metallic Mining and Quarrying	COUNTY and STATE	EMPLOYMENT SM ESTIMATE Total Mining	Metal Mining	Anthracite, Bituminous Coal and Lignite Mining	Crude Petroleum Natural Gas Extraction	Non-Metallic Mining and Quarrying
Harris, Tex.	17,503	...	...	16,463	1,040	Midland, Tex.	7,391	...	...	7,391	...
Los Angeles, Cal.	15,548	115	...	12,782	2,651	Kern, Cal.	7,327	43	...	6,468	816
Tulsa, Okla.	12,475	...	15	12,117	343	Cook, Ill.	7,204	...	...	2,644	4,560
St. Louis, Minn.	11,317	11,291	...	...	26	Schuylkill, Pa.	6,889	...	6,829	10	50
McDowell, W. Va.	9,679	...	9,679	...	...	Wichita, Tex.	6,048	...	...	6,032	16
Luzerne, Pa.	9,620	...	9,536	...	84	Raleigh, W. Va.	5,986	...	5,982	...	4
Jefferson, Ala.	9,565	2,994	6,346	6	219	Salt Lake, Utah	5,832	5,464	...	231	137
Dallas, Tex.	9,129	87	...	8,580	462	Greene, Pa.	5,757	...	5,531	215	11
Logan, W. Va.	8,221	...	8,207	14	...	Eddy, N. M.	5,677	...	...	890	4,787
Cambria, Pa.	7,801	...	7,734	...	67	Oklahoma, Okla.	5,644	...	...	5,509	135

© SM, 1959.

Quiz on Prospect Identification by Codes, Page 15

SM Estimates for 100 Leading Counties with 55% of 1958 Employment (Cont'd)

COUNTY and STATE	EMPLOYMENT SM ESTIMATE				
	Total Mining	Metal Mining	Anthracite, Bituminous Coal and Lignite Mining	Crude Petroleum Natural Gas Extraction	Non-Metallic Mining and Quarrying
Buchanan, Va.	5,604	...	5,567	37	...
Silver Bow, Mont.	5,492	5,245	...	...	247
Washington, Pa.	5,366	...	5,143	214	9
Harlan, Ky.	5,286	...	5,286	...	...
Lackawanna, Pa.	4,856	...	4,662	...	194
Orleans, La.	4,797	...	...	4,744	53
Pike, Ky.	4,756	...	4,371	379	6
Wyoming, W. Va.	4,601	...	4,523	52	26
Tarrant, Tex.	4,444	9	...	4,216	219
Allegheny, Pa.	4,427	30	3,850	311	236
Fayette, W. Va.	4,397	...	4,368	29	...
Lea, N. M.	4,301	17	...	4,284	...
Kanawha, W. Va.	4,130	...	3,469	606	55
Sedgwick, Kans.	4,019	...	...	3,953	66
Marion, W. Va.	3,940	...	3,796	144	...
Ector, Tex.	3,843	...	...	3,824	19
Nueces, Tex.	3,734	...	...	3,609	125
Floyd, Ky.	3,730	...	3,456	274	...
Polk, Fla.	3,705	...	...	...	3,705
Caddo, La.	3,661	...	...	3,609	52
Pinal, Ariz.	3,599	3,584	...	...	15
Wise, Va.	3,539	...	3,490	...	49
Indiana, Pa.	3,455	...	3,361	75	19
Perry, Ky.	3,364	...	3,364	...	...
Monongalia, W. Va.	3,359	...	3,247	9	103
Soshone Idaho	3,331	3,331	...	...	...
Hopkins, Ky.	3,299	...	3,297	...	2
Plaquemines, La.	3,283	...	...	1,941	1,342
Denver, Colo.	2,899	187	...	2,409	303
Marquette, Mich.	2,888	2,862	...	...	26
Gila, Ariz.	2,830	2,652	...	...	178
New York (5 Counties), N. Y.	2,794	1,714	63	475	542
Fayette, Pa.	2,776	..	2,711	...	65
Natrona, Wyo.	2,768	...	...	2,732	36
Clearfield, Pa.	2,765	...	2,360	2	403
Mingo, W. Va.	2,694	...	2,662	25	7
Lafayette, La.	2,692	...	...	2,692	...
Harrison, W. Va.	2,689	...	2,599	90	...
Letcher, Ky.	2,685	...	2,645	20	20
Jefferson, Tex.	2,597	...	...	2,437	160
Gregg, Tex.	2,553	...	...	2,553	...
St. Francois, Mo.	2,539	2,534	...	...	5

COUNTY and STATE	EMPLOYMENT SM ESTIMATE				
	Total Mining	Metal Mining	Anthracite, Bituminous Coal and Lignite Mining	Crude Petroleum Natural Gas Extraction	Non-Metallic Mining and Quarrying
Franklin, Ill.	2,507	...	2,450	57	...
Belmont, Ohio	2,392	...	2,372	12	8
Boone, W. Va.	2,381	...	2,250	131	...
Nicholas, W. Va.	2,377	...	2,363	10	4
Bexar, Tex.	2,363	...	...	2,179	184
McKean, Pa.	2,332	...	21	2,278	33
Pima, Ariz.	2,279	2,123	...	...	156
Tazewell, Va.	2,270	...	2,268	...	2
Ventura, Cal.	2,262	...	...	2,100	162
Dickenson, Va.	2,249	...	2,249	...	...
Northumberland, Pa.	2,156	...	2,110	...	46
Stephens, Okla.	2,057	...	...	2,057	...
Smith, Tex.	2,016	...	...	2,016	...
Cochise, Ariz.	1,999	1,997	...	...	2
Carbon, Utah	1,957	9	1,912	36	...
Itasca, Minn.	1,934	1,921	...	...	13
Somerset, Pa.	1,920	...	1,902	...	18
Mercer, W. Va.	1,848	...	1,752	...	96
Winkler, Tex.	1,824	...	...	1,824	...
Barton, Kans.	1,747	...	...	1,716	31
Westmoreland, Pa.	1,745	...	1,698	25	22
Lawrence, S. D.	1,706	1,672	...	17	17
Rusk, Tex.	1,690	...	...	1,690	...
Seminole, Okla.	1,678	...	...	1,676	2
Carter, Okla.	1,660	...	...	1,660	...
Iron, Mich.	1,647	1,647	...	...	...
Taylor, Tex.	1,624	...	...	1,602	22
Andrews, Tex.	1,594	...	...	1,594	...
Calcasieu, La.	1,586	...	...	1,472	114
Gogebic, Mich.	1,571	1,571	...	...	...
Wharton, Tex.	1,545	...	...	546	999
St. Lawrence, N. Y.	1,516	1,093	...	...	423
Preston, W. Va.	1,513	...	1,493	13	7
Hutchinson, Tex.	1,485	...	...	1,485	...
Lake, Colo.	1,465	1,463	...	...	2
San Bernardino, Cal.	1,454	61	...	48	1,345
Orange, Cal.	1,435	6	...	1,169	260
Armstrong, Pa.	1,366	...	973	133	260
Total Above Counties	400,230	55,722	163,362	152,603	27,943
Industry Total	728,208	94,002	217,630	306,294	110,082
% U. S. A. Total	55.0	59.3	75.3	49.8	25.4

© SM, 1959.

Looking for Industrial Marketing Consultants?

Good industrial marketing can be the clue to maintaining full capacity operation. If you have a problem in industrial marketing, involving finding new markets, exploring the potential of old markets, or if you need help in setting up forecasting techniques, write to:

Market Statistics, Inc.

630 Third Avenue, New York 17, New York

WESTERN ARCHITECT and ENGINEER . . . McGraw-Hill successor to

Architect and Engineer serving professional planners, designers, engineers, financiers and builders of the 11 western states, Alaska and Hawaii since 1905. It reaches over 7,000 people in the following categories who control and specify the expenditure of over $8.5 BILLION ANNUALLY in the West . . .

ARCHITECTS
ENGINEERING SPECIALISTS in mechanical, electrical, structural and similar firms who prepare plans, specifications for specialized functions.
CONSULTANTS in color, hardware, lighting, landscaping, kitchens, protection, acoustics, etc.
LARGE BUILDERS of residential, commercial, institutional, educational, public and light industrial buildings.
MISCELLANEOUS —planning commissions, school boards, federal agencies, manufacturers of building materials and supplies, schools of engineering and architecture, mortgage institutions, etc.



WESTERN ARCHITECT and ENGINEER
A McGRAW-HILL PUBLICATION
68 POST STREET, SAN FRANCISCO

LOS ANGELES • 1125 W. Sixth St.
CHICAGO • 520 N. Michigan Ave.
NEW YORK • 500 Fifth Avenue
CLEVELAND • 1164 Illuminating Bldg.
ATLANTA • Rhodes-Haverty Bldg.
PITTSBURGH • Oliver Building
DENVER • 1740 Broadway

ANNUAL WESTERN CONSTRUCTION EXPENDITURES

	DOLLAR VOLUME	% OF U.S. TOTAL
DWELLINGS	$4,850,000,000	29.1
COMMERCIAL BUILDINGS	1,050,000,000	24.8
SCHOOLS	839,000,000	23.0
INSTITUTIONS	1,150,000,000	27.2
PUBLIC UTILITY BUILDINGS	120,000,000	29.3
MODERNIZATION	500,000,000	26.1
	$8,509,000,000	26% of U.S. Total

Contract Construction Employment, Leading Counties

SM Estimates, First Quarter, 1958, for 100 Counties with 55.7% of Employment

COUNTY and STATE	SM EMPLOYMENT ESTIMATES Total	General Bldg. Contr's.	General Contr's. except Bldg.	Special Trade Contr's.
New York (5 Counties), N. Y.	111,861	22,948	16,300	72,613
Los Angeles, Cal.	103,342	29,988	20,715	52,639
Cook, Ill.	88,947	23,928	8,337	56,682
Wayne, Mich.	40,582	9,896	3,281	27,705
Harris, Tex.	32,895	8,878	11,528	12,489
Philadelphia, Pa.	30,147	7,750	4,262	18,135
Allegheny, Pa.	28,255	8,849	6,832	12,774
Cuyahoga, Ohio	23,898	7,962	2,542	13,294
Dallas, Tex.	23,048	7,179	4,757	11,109
Dade, Fla.	22,304	8,484	3,196	10,704
Baltimore City, Md.	19,941	5,192	3,714	11,035
Milwaukee, Wis.	17,577	5,227	1,596	10,754
San Francisco, Cal.	16,920	4,512	3,721	8,687
Alameda, Cal.	16,461	4,827	3,539	8,095
San Diego, Cal.	16,304	5,619	2,414	8,271
Dist. of Col., D. C.	15,784	4,774	1,989	9,021
Suffolk, Mass.	15,208	3,810	3,532	7,866
Hamilton, Ohio	15,204	3,886	2,152	9,166
Fulton, Ga.	14,991	5,045	2,367	7,579
Erie, N. Y.	14,781	4,449	2,055	8,276
King, Wash.	14,613	5,032	2,670	6,911
Westchester, N. Y.	14,509	3,709	3,432	7,368
Middlesex, Mass.	14,294	4,917	2,539	6,838
Nassau, N. Y.	14,190	2,755	2,044	9,391
St. Louis City, Mo.	13,993	3,717	1,133	9,143
Hennepin, Minn.	13,834	4,586	1,270	7,978
Franklin, Ohio	12,927	4,587	1,761	6,579
Denver, Colo.	12,919	4,644	1,973	6,302
Maricopa, Ariz.	12,562	3,998	2,122	6,442
Jackson, Mo.	12,467	3,625	2,109	6,733
Orleans, La.	12,036	4,227	2,216	5,591
Fairfield, Conn.	11,826	5,110	1,571	5,145
Lake, Ind.	11,264	2,213	5,543	3,508
Bexar, Tex.	11,026	3,076	2,504	5,446
New Haven, Conn.	10,924	3,258	3,285	4,381
Marion, Ind.	10,893	3,381	1,182	6,330
Hillsborough, Fla.	10,854	3,775	3,354	3,725
Shelby, Tenn.	10,750	3,763	1,511	5,456
*Norfolk, Va.	10,682	2,113	2,701	5,848
Jefferson, Ala.	10,547	3,204	2,600	4,743
Essex, N. J.	10,399	2,838	1,314	6,255
Contra Costa, Cal.	10,373	3,177	3,756	3,440
Santa Clara, Cal.	10,202	3,668	1,847	4,889
Orange, Cal.	10,151	3,741	1,229	5,181
Hartford, Conn.	9,960	3,309	1,486	5,165
††Henrico, Va.	9,715	3,018	1,014	5,683
Broward, Fla.	9,659	3,139	2,452	4,067
Tarrant, Tex.	9,628	2,845	1,911	4,872
Bergen, N. J.	9,563	3,350	1,137	5,076
Pinellas, Fla.	9,110	2,866	1,815	4,429
San Bernardino, Cal.	9,039	1,892	3,650	3,497
Duval, Fla.	8,781	2,525	2,121	4,135
Multnomah, Ore.	8,669	2,679	1,279	4,711
Jefferson, Ky.	8,657	2,858	1,310	4,689
Mecklenburg, N. C.	8,548	2,695	1,404	4,449
Tulsa, Okla.	8,289	3,131	1,650	3,488
Davidson, Tenn.	8,189	2,820	1,480	3,889
Monroe, N. Y.	7,899	2,890	800	4,169
St. Louis, Mo.	7,833	2,355	1,193	4,285
Oklahoma, Okla.	7,821	2,524	1,946	3,451
Montgomery, Pa.	7,667	2,283	1,645	3,739
Providence, R. I.	7,616	2,548	1,105	3,965
New Castle, Del.	7,600	986	4,707	1,907
San Mateo, Cal.	7,522	3,180	1,213	3,129
Sacramento, Cal.	7,300	2,318	1,362	3,620
Greenville, S. C.	7,032	5,128	339	1,615
‡Arlington, Va.	7,074	1,936	1,129	4,009
Jefferson, Tex.	6,903	1,843	3,258	2,002
Douglas, Nebr.	6,808	2,341	1,218	3,247
Ramsey, Minn.	6,694	2,206	589	3,899
E. Baton Rouge, La.	6,608	2,485	2,328	1,815
Bernalillo, N. M.	6,573	2,738	859	2,976
Palm Beach, Fla.	6,426	1,973	1,957	2,496
Union, N. J.	6,389	2,497	805	3,087
Montgomery, Ohio	6,279	2,254	669	3,356
Lucas, Ohio	6,243	2,098	398	3,747
Worcester, Mass.	6,134	1,817	1,653	2,664
Delaware, Pa.	6,063	1,191	1,749	3,123
Sedgwick, Kans.	5,948	2,722	901	2,325
Guilford, N. C.	5,846	1,971	765	3,110
Salt Lake, Utah	5,828	2,024	852	2,952
Orange, Fla.	5,808	1,829	1,191	2,788
St. Louis, Minn.	5,750	2,792	1,054	1,904
Suffolk, N. Y.	5,660	1,653	1,090	2,917
Nueces, Tex.	5,599	1,940	1,690	2,069
Passaic, N. J.	5,578	1,677	484	3,417
Onondaga, N. Y.	5,493	1,844	759	2,890
Montgomery, Md.	5,476	1,984	474	3,018
Hudson, N. J.	5,391	1,227	1,446	2,718
Caddo, La.	5,327	1,613	1,206	2,506
Norfolk, Mass.	5,277	1,810	1,047	2,420
Oakland, Mich.	5,189	1,583	702	2,904
El Paso, Tex.	5,067	1,627	627	2,813
Mahoning, Ohio	5,064	1,949	568	2,547
Hampden, Mass.	4,978	1,585	1,041	2,352
Camden, N. J.	4,612	1,385	981	2,266
Summit, Ohio	4,383	1,448	613	2,322
Baltimore, Md.	4,326	1,162	1,597	1,567
Kent, Mich.	3,828	1,328	307	2,193
Middlesex, N. J.	3,572	1,040	536	1,996
Total Above Counties	1,334,700	396,007	237,729	700,964
Industry Total	2,394,872	781,216	475,580	1,138,076
% of U. S. Total	55.7	50.7	50.0	61.6

* Includes Norfolk, Portsmouth and South Norfolk Cities, Va.
† Includes Richmond City, Va.
‡ Includes Alexandria City, Va.

©SM, 1959.



CIVIL ENGINEERING
delivers the quality audience of the construction market!

Every industrial market is made up of many different "buying influences." All participate, to some extent, in the final purchase decisions, but a few are obviously *much* more important than others.

In the construction industry, with its requirements for technical "know-how," *civil engineers* are the key buying factors for all types of construction equipment, materials and services.

CIVIL ENGINEERING, the official publication of ASCE, reaches 44,000 fully-qualified civil engineers – trained men devoting their lives to every phase of construction. They are lifetime customers and prospects, *not* a "here-today, gone-tomorrow" audience. The renewal rate among ASCE members is an unequalled high of 88.65%. Even when they move from project to project, CIVIL ENGINEERING goes along. Address changes during 1958 alone numbered some 21,600 – striking evidence of how CIVIL ENGINEERING quickly and continuously services and influences its readers.

In all types of construction projects–buildings, highways, airports, bridges, etc., civil engineers hold key positions at all stages of the construction process–from conception to completion.

Regardless of whether the principal buying-specifying influence in *your* market is the consultant, contractor, public works engineer, owners' staff engineer–or all of these–you must sell civil engineers.

- **Consultants** are engaged by all three of the other groups for specific engineering tasks. An important phase of their work involves specifying installed equipment and construction materials. CIVIL ENGINEERING delivers 10,257 consultants–*all* of them specialists in construction, sanitation and other types of civil engineering. A brand-new breakdown of readers in 292 prominent consulting firms clearly shows the quality of this portion of the CIVIL ENGINEERING audience.
- **Contractors,** of course, are responsible for the bulk of construction equipment purchasing. CIVIL ENGINEERING's solid coverage of top contractor organizations–the 20% who do 85% of the business – is evident from a survey that revealed 90% of its 6,218 contractor readers are in $1,000,000-a-year-plus contractor organizations. Here, again, is qualitative circulation – to men who naturally have an important voice in company expenditures for large quantities of construction equipment and materials.
- **Public works engineers** . . . the men responsible for vast federal, state and local government projects such as dams, highways, sewage disposal, reclamation and flood control . . . have a major influence in the specification and purchase of billions of dollars worth of construction industry products each year. Among all leading publications in its field, CIVIL ENGINEERING offers the largest audience of public works engineers – 14,129 vital buying and specifying influences.
- A smaller, but equally important segment of readers is the group of 4,469 **owners' staff engineers.** They hold pivotal positions in commercial and industrial firms that need qualified engineers to plan, design and supervise plant expansion and maintenance. Naturally they must make and control product purchases and specifications for their firms.

Right down the line . . . and including engineering school coverage where tomorrow's practicing engineers are developing . . . CIVIL ENGINEERING consistently provides only top quality circulation, exclusively in the engineered construction field . . . at the lowest cost of all leading publications serving the broad construction industry.

Over the years CIVIL ENGINEERING has grown, and will continue to grow, along with the profession and the construction industry. The basic reason is obvious. It provides a unique service for its 44,000 readers . . . quality editorial coverage of all significant new construction techniques and engineering developments. A continuing survey of hundreds of readers each month keeps a constant check on their needs and interests. Furthermore it proves that they read and prefer CIVIL ENGINEERING above all other publications in the construction field.

CIVIL ENGINEERING's quality story can mean sales in the engineered construction market for you!

FOR MORE FACTS, CONTACT: *New York 18,* Robert S. Cypher, 33 W. 39th St. • *Chicago 1,* Richard K. Holmstrom, 84 E. Randolph St. • *Birmingham 9,* Fred W. Smith, 1201 Forest View Lane, Vesthaven • *San Francisco 5,* McDonald-Thompson, 625 Market St. • *Los Angeles 5,* McDonald-Thompson, 3727 W. Sixth St. • *Seattle 4,* McDonald-Thompson, National Bldg., 1008 Western Ave. • *Houston 6,* McDonald-Thompson, 3217 Montrose Blvd. • *Denver 3,* McDonald-Thompson, 620 Sherman St. • *Tulsa 4,* McDonald-Thompson, 2010 S. Utica St. • *Portland 4,* McDonald-Thompson, 404 Times Bldg.

CIVIL ENGINEERING

The Magazine of Engineered Construction, 33 West 39th Street, New York, N. Y.

A Construction Market Report from

Contractors and Engineers

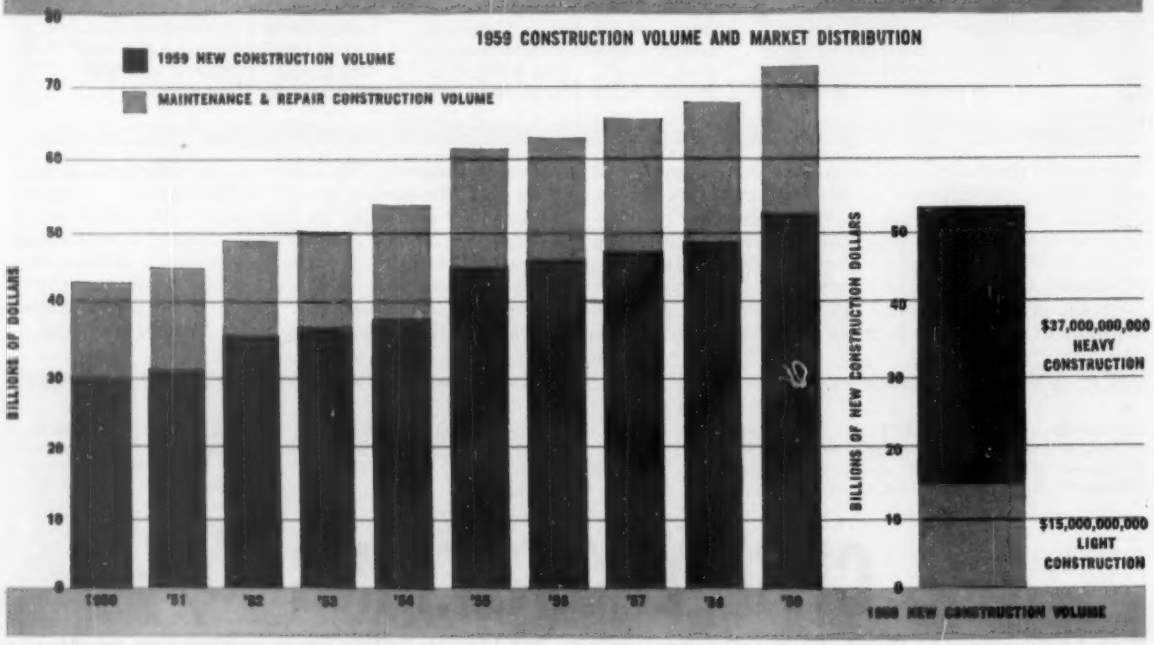
HEAVY CONSTRUCTION: HEADING UP

1959: $72 Billion Dollars of Construction Volume

A *$5 billion increase* over 1958's national construction volume makes 1959 the most prosperous year in construction history. *Modernization* of previous construction swells to $20 billion in 1959; *new construction* volume reaches a peak of $52.2 billion.

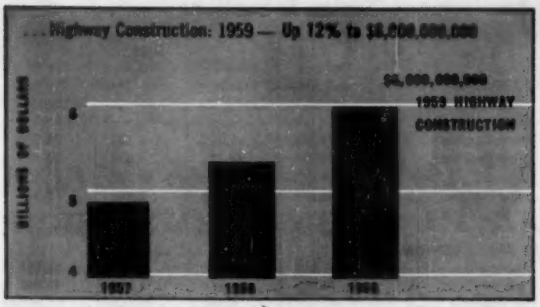
Heavy Construction Takes a 71% Share of the 1959 New Construction Budget

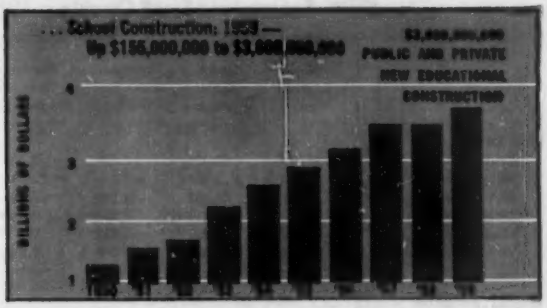
Vigorous investment in public construction and commercial/industrial capital construction, coupled with an unprecedented surge in apartment residential construction, gives heavy construction an estimated 71% share of the $52.2 billion dollar new construction market: *more than $37,000,000,000 in new heavy construction in 1959.*

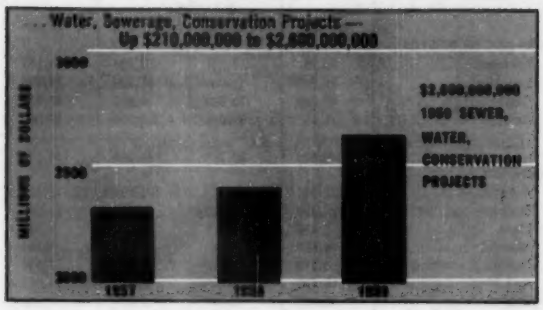


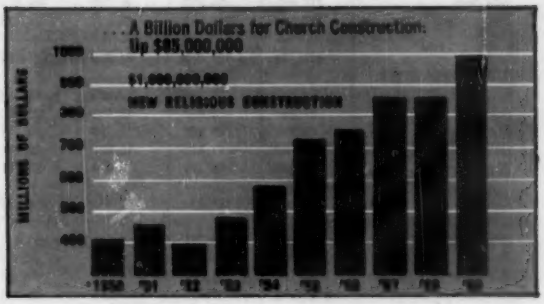
Brisk Expansion in Construction to Handle the Population Boom

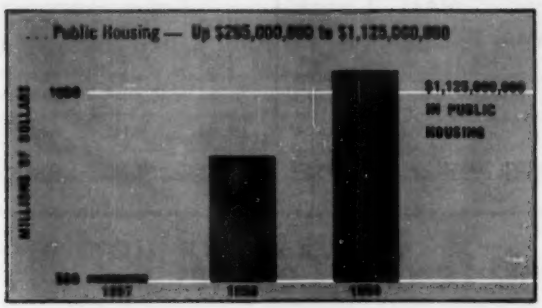
With a 200,000,000 U. S. population just around the corner, private and government sources are concentrating on new construction of community facilities . . .

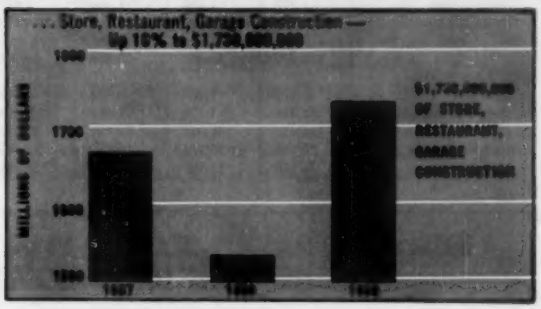


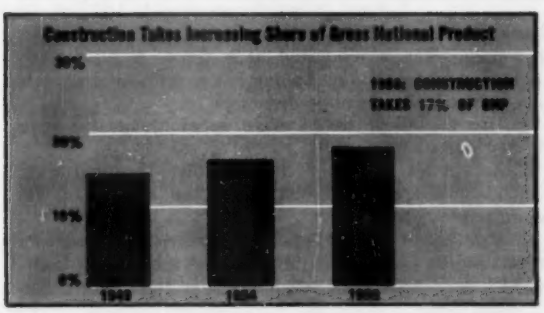












Significance: **Heavy Construction to Continue on Large Scale**

- After the present spurt in heavy construction, the industry will shift its attention increasingly to economic areas on the verge of rapid expansion: factory automation, new office buildings, multi-family residential buildings, urban renewal projects.
- Equipment sales to the construction industry will zoom — hot competition for heavy construction contracts means a nationwide "beefing up" of construction companies' bidding capabilities, through increased equipment ownership.
- Greater demand for equipment means greater competition for the market among greater numbers of construction-equipment producers — and a continuously growing need for producers to sell the nation's heavy contractors, starting now.

Published in the Interests of Better Construction Industry Marketing by

Contractors and Engineers

A Buttenheim Publication, 470 Fourth Avenue, New York, N. Y.

Summary of Contract Construction Employment, States & Section

SM Estimates, First Quarter, 1958, for Employment, States & Sections

SECTIONS and STATES	Contract Construction Total	General Building Contractors	General Contractors other than Building	Special Trade Contractors
NEW ENGLAND				
Connecticut	38,185	13,606	7,226	17,333
Maine	9,010	3,405	1,770	3,835
Massachusetts	62,417	20,023	13,388	29,006
New Hampshire	6,203	2,415	1,033	2,945
Rhode Island	10,256	3,638	1,647	4,971
Vermont	2,960	1,396	259	1,243
	129,141	44,485	25,323	59,333
MIDDLE ATLANTIC				
New Jersey	70,972	23,484	11,222	36,266
New York	217,641	54,323	36,747	126,571
Pennsylvania	144,586	42,883	26,837	74,836
	433,199	120,670	74,806	237,693
EAST NORTH CENTRAL				
Illinois	154,672	46,672	18,085	89,915
Indiana	67,388	20,662	12,396	34,330
Michigan	69,913	21,937	7,725	40,251
Ohio	118,109	41,638	15,827	60,644
Wisconsin	42,925	14,319	4,880	23,747
	443,007	145,228	58,892	238,889
WEST NORTH CENTRAL				
Iowa	23,307	8,721	3,599	10,987
Kansas	32,788	10,899	10,566	11,333
Minnesota	36,899	13,401	6,200	18,998
Missouri	57,083	17,926	9,766	29,991
Nebraska	16,444	5,338	3,326	7,780
North Dakota	4,278	1,410	1,044	1,824
South Dakota	5,027	1,587	1,473	1,967
	178,236	59,282	35,974	82,980
SOUTH ATLANTIC				
Delaware	10,550	1,084	5,930	2,956
District of Columbia	15,784	4,774	1,989	9,021
Florida	107,438	38,261	24,121	45,053
Georgia	52,194	20,685	10,714	20,795
Maryland	48,785	16,148	9,314	23,301
North Carolina	53,582	21,472	8,034	24,076
South Carolina	29,771	14,172	5,479	10,120
Virginia	59,294	19,204	12,785	27,305
West Virginia	20,839	6,252	5,043	9,544
	398,184	142,624	83,389	172,171
EAST SOUTH CENTRAL				
Alabama	33,989	14,028	8,094	11,867
Kentucky	24,451	8,284	4,607	11,560
Mississippi	17,369	8,326	5,100	5,943
Tennessee	39,113	14,955	7,674	16,484
	114,922	43,593	25,475	45,854
WEST SOUTH CENTRAL				
Arkansas	18,197	5,231	3,904	8,062
Louisiana	58,311	17,908	21,259	19,144
Oklahoma	31,750	10,800	8,576	12,374
Texas	161,417	49,008	44,822	66,987
	266,675	83,347	78,561	104,767
MOUNTAIN				
Arizona	22,954	7,637	4,485	10,832
Colorado	25,634	8,991	4,382	12,281
Idaho	7,439	2,176	2,725	2,538
Montana	6,867	2,631	1,601	2,735
Nevada	5,113	1,681	993	2,439
New Mexico	10,500	6,802	5,353	6,345
Utah	10,505	3,447	2,171	4,887
Wyoming	5,179	1,485	1,727	1,987
	102,291	34,830	23,417	44,044
PACIFIC				
California	273,347	87,510	57,032	128,805
Oregon	18,980	6,194	4,279	8,507
Washington	36,920	13,453	8,432	15,035
	329,247	107,157	69,743	152,347
UNITED STATES	2,394,872	781,216	475,580	1,138,076

© SM, 1959.

Public Utilities Employment, Leading Counties

Selling to Public Utilities

By C. F. OGDEN,
Vice President, The Detroit Edison Co.

Utility buyers rank only 50% of the salesmen calling on them as effective representatives of their products in terms of knowledge of product and knowledge of product application in the buyer's company.

Obviously supplier companies would improve service to this industry by training salesmen to:

1. Develop a thought-out purpose for each call. Buyers dislike, but hear so often, "What can I do for you today?" The salesman should have something concrete to offer, information on new products for instance, or he might discuss some of the shortcomings of his equipment and steps being taken to correct them. He should talk with the buyer before contacting the using department. And he should discontinue routine visits.

2. Handle service problems with intelligence. Too often the salesman fails to consider his responsibility in representing the customer's interest within his own organization.

3. Make proposals more attractive. Each proposal should be a complete sales effort, not just an offer to supply what is requested at a price. A little study might develop special packaging features, or orders might be combined for quantity discounts.

4. Use the telephone to make appointments for visits of long duration.

5. Accept loss of an order gracefully. This will leave a good impression and help keep the door open for future requests to bid.

The utility industry has high quality standards for its equipment because of the need for minimizing costly out-of-service time. This requirement is somewhat different from normal industrial requirements because of the larger sizes, pressures, temperature and voltage considerations for utility equipment. In today's pattern of electrical living, power failures cannot be tolerated. Companies selling to the utilities should understand this.

Automation is starting to affect buying operations, and will become increasingly significant in the years ahead. It will mean buying in larger quantities and contracting on a blanket-order basis to a larger extent than at present. There may be fewer sales calls needed, but greater need for conscientious follow-through.



Buying data from national survey by Associated Equipment Distributors.

REACH *MORE* CONTRACTING FIRMS, PLUS *MORE* CUSTOMERS IN ALL OTHER BUYING GROUPS

With Construction Equipment Magazine you reach all the groups you should reach—and neglect none.

Contractor circulation, for instance, totals over 35,000. As big as you can find anywhere.

Contractor firms covered total 26,843 in the U.S. and Canada. (As audited by the Certified Readership Audit Company.) That means you get *multiple coverage* in 2,988 large and medium size firms . . . and *pinpoint coverage* of the key men in 23,855 smaller firms.

By comparison

	Contracting Firms Covered
CONSTRUCTION EQUIPMENT	26,843
Contractors & Engineers	21,383
Construction Methods	13,250

Correct penetration in each firm is determined by local equipment distributors. They know better than any desk-bound circulation manager or subscription canvasser how many persons control the buying decisions—and exactly who they are.

Governments, industrials, too. Where many magazines stop short with contractors, CONSTRUCTION EQUIPMENT goes on to cover the other 50% of the market. Over 19,000 copies go to key decision makers in the government, mining, materials production, logging and industrial fields.

Reason: sales to non-contractors run equal to contractor sales.

	Estimated Equipment Owned by . . .	
	Contractors	Other Buyers
Crawler tractors	56,000	52,000
Wheel tractors	20,000	28,000
Low-bed trailers	14,000	10,000
Centrifugal pumps	36,000	31,000

To reach these other buying groups, CONSTRUCTION EQUIPMENT employs the same circulation network. (Because distributors contact and sell to every type of customer.) So your advertising is carried to the *right* non-contracting organizations—those which buy construction products and are big enough to be worth covering.

What you get: coverage of the entire market for equipment and materials with one magazine.

DID YOU KNOW...?

- CONSTRUCTION EQUIPMENT Magazine must make 41,000 stencil changes and corrections a year to keep up with the fast-moving construction market.
- One out of six CONSTRUCTION EQUIPMENT inquiries becomes a sale within three months, when followed up by a salesman. Surveys report another 51% are likely to become sales.
- CONSTRUCTION EQUIPMENT editors added many new features this year and completely modernized the magazine's appearance. One change: switch to standard size format.
- Top management people *do* use reader service cards. Two-thirds of CONSTRUCTION EQUIPMENT sales leads come from Presidents, Owners, Partners, Vice Presidents, General Managers and others with high company rank.

EDITED FOR ENTIRE MARKET

All men who buy and manage the use of construction products have certain common interests. This is true whether they work for contractors, county road departments, strip mining firms or whatever. The common information needs exist. Only CONSTRUCTION EQUIPMENT serves them.

Our editors give readers latest ideas on Management, Projects, Maintenance and Buying. It's 90% staff-written. It's written and illustrated for fast reading. Men who make buying decisions depend on CONSTRUCTION EQUIPMENT.





Construction Equipment
MAGAZINE
205 East 42nd Street, New York 17
A CONOVER-MAST PUBLICATION

For the men who buy modern machines and materials —for profit

BPA
ABP

Public Utilities Employment, Leading Counties

SM Estimates, 1st Quarter, 1958, for 100 Counties with 65.8% of Employment

COUNTY and STATE	SM EMPLOYMENT ESTIMATES Total	Transportation	Telecommunications	Utilities, Sanitary Services
New York (5 Counties), N. Y.	244,169	147,740	67,072	29,357
Cook, Ill.	134,137	80,960	33,393	19,784
Los Angeles, Cal.	119,483	58,398	43,167	17,918
Philadelphia, Pa.	59,271	37,773	11,951	9,547
Wayne, Mich.	43,258	24,632	14,086	4,538
San Francisco, Cal.	40,974	23,651	11,930	5,393
Suffolk, Mass.	39,129	21,163	12,791	5,175
Baltimore City, Md.	38,924	24,758	6,873	7,293
Allegheny, Pa.	33,580	16,866	8,525	8,189
Cuyahoga, Ohio	30,227	18,219	7,321	4,687
Harris, Tex.	28,720	18,716	4,177	5,827
Dade, Fla.	27,945	20,902	4,379	2,664
Fulton, Ga.	26,780	14,236	6,571	5,973
St. Louis City, Mo.	25,896	14,233	6,351	5,312
Orleans, La.	25,633	17,639	3,956	4,038
Dallas, Tex.	24,589	13,617	6,012	4,970
Essex, N. J.	24,234	12,209	7,543	4,482
King, Wash.	22,932	14,782	6,501	1,649
District of Columbia	21,361	8,237	8,003	5,121
Milwaukee, Wis.	21,031	10,485	5,546	5,000
Alameda, Cal.	20,436	11,301	5,740	3,395
Jackson, Mo.	20,052	12,141	4,858	3,053
Hamilton, Ohio	19,902	10,758	5,417	3,727
Hudson, N. J.	19,823	16,759	1,548	2,316
Denver, Colo.	18,861	10,035	5,933	2,893
Erie, N. Y.	18,682	10,573	4,179	3,930
Hennepin, Minn.	18,306	8,695	5,416	4,195
Multnomah, Ore.	16,946	9,762	5,065	2,119
Middlesex, Mass.	14,868	8,240	3,500	2,928
Marion, Ind.	13,913	8,011	3,944	1,958
San Mateo, Cal.	13,214	11,475	1,436	303
Nassau, N. Y.	13,038	3,416	5,600	4,022
Franklin, Ohio	12,749	5,747	3,738	3,264
Jefferson, Ky.	12,544	6,689	3,046	2,809
New Haven, Conn.	12,480	5,080	4,686	2,684
Tulsa, Okla.	12,222	7,979	1,761	2,482
Ramsey, Minn.	11,787	8,944	1,529	1,314
San Diego, Cal.	11,679	4,455	3,864	3,360
Westchester, N. Y.	11,618	3,721	5,761	2,136
Oklahoma, Okla.	11,278	5,698	3,139	2,441
*Norfolk, Va.	11,184	8,386	1,726	1,072
Summit, Ohio	10,869	6,497	1,966	2,406
Providence, R. I.	10,225	4,688	3,003	2,534
Bergen, N. J.	9,737	5,661	2,492	1,584
Jefferson, Ala.	9,732	4,474	2,674	2,584
Hartford, Conn.	9,589	4,469	2,549	2,571
Arlington, Va.	9,372	7,112	1,193	1,067
Shelby, Tenn.	9,178	6,632	2,484	62
Fairfield, Conn.	9,124	4,512	2,392	2,220
†Henrico Va.	9,110	4,881	2,931	1,298
Tarrant, Tex.	8,883	4,709	2,159	2,015
Salt Lake, Utah	8,531	3,631	2,661	2,239
Maricopa, Ariz.	8,268	3,545	2,046	2,677
Passaic, N. J.	7,988	4,313	2,525	1,150
Douglas, Nebr.	7,939	4,613	2,654	672
Mecklenburg, N. C.	7,931	4,658	1,874	1,399
Monroe, N. Y.	7,868	2,837	2,809	2,222
Duval, Fla.	7,863	5,249	2,378	236
Worcester, Mass.	7,778	3,557	2,159	2,062
Montgomery, Ohio	7,759	3,484	2,278	2,017
Union, N. J.	7,649	3,433	2,414	1,802
Lake, Ind.	7,589	3,751	1,466	2,352
Lucas, Ohio	7,505	4,092	1,576	1,837
Kanawha, W. Va.	7,423	2,290	2,086	3,049
Davidson, Tenn.	7,395	4,448	2,615	332
Onondaga, N. Y.	7,341	3,414	2,423	1,504
Essex, Mass.	7,307	2,630	2,827	1,850
Fresno, Cal.	7,276	2,980	2,167	2,129
Hillsborough, Fla.	7,235	4,710	1,394	1,131
Delaware, Pa.	7,086	3,458	2,515	1,113
Bexar, Tex.	7,028	4,344	2,346	336
Albany, N. Y.	6,927	2,440	3,387	1,100
Montgomery, Pa.	6,868	2,431	2,534	1,903
St. Louis, Mo.	6,861	5,172	1,027	662
Caddo, La.	6,768	2,034	1,196	3,538
Santa Clara, Cal.	6,760	2,699	2,571	1,490
Mobile, Ala.	6,682	4,842	974	866
Sacramento, Cal.	6,523	2,348	3,042	1,135
Polk, Iowa	6,315	3,023	2,489	803
New Castle, Del.	6,198	3,274	1,560	1,364
Kent, Mich.	6,182	2,894	2,160	1,128
El Paso, Tex.	5,972	2,343	1,041	2,588
Hampden, Mass.	5,793	2,359	2,187	1,247
Luzerne, Pa.	5,729	1,973	1,678	2,078
Dauphin, Pa.	5,639	1,697	2,918	1,024
Suffolk, N. Y.	5,516	1,140	2,852	1,524
Galveston, Tex.	5,427	4,703	420	304
Sedgwick, Kans.	5,376	2,402	1,509	1,465
Lackawanna, Pa.	5,093	2,661	885	1,527
Middlesex, N. J.	5,054	2,960	1,096	998
Bristol, Mass.	4,813	2,317	1,218	1,278
Camden, N. J.	4,809	1,842	2,022	945
Lehigh, Pa.	4,796	1,774	596	2,426
Genesee, Mich.	4,730	2,709	1,109	912
San Joaquin, Cal.	4,497	2,154	1,066	1,277
Jefferson, Tex.	4,420	2,514	723	1,183
Allen, Ind.	4,385	2,593	856	936
Spokane, Wash.	4,315	1,896	1,551	865
Wyandotte, Kans.	4,294	3,735	335	224
Mercer, N. J.	4,100	1,910	1,473	717
Total Above Counties	1,756,833	982,003	473,555	301,275
Industry Total	2,669,048	1,325,111	752,981	590,976
% of U. S. A. Total	65.8	74.1	62.9	51.0

Wholesale Trade Employment, Leading Counties

SM Estimates, 1st Quarter, 1958, for 100 Counties with 66.3% of Employment

COUNTY and STATE	SM EMPLOYMENT Estimates 1st Quarter, 1958
New York, N. Y.	334,221
Cook, Ill.	161,858
Los Angeles, Cal.	130,206
Philadelphia, Pa.	65,376
Wayne, Mich.	55,490
Suffolk, Mass.	50,701
San Francisco, Cal.	46,914
Cuyahoga, Ohio	45,420
St. Louis City, Mo.	41,736
Allegheny, Pa.	36,466
Dallas, Tex.	35,729
Harris, Tex.	35,630
Fulton, Ga.	32,121
Hennepin, Minn.	30,824
King, Wash.	27,909
Jackson, Mo.	25,685
Baltimore City, Md.	25,662
Hamilton, Ohio	23,694
Orleans, La.	23,527
Essex, N. J.	22,279
Marion, Ind.	21,990
Erie, N. Y.	21,236
Milwaukee, Wis.	21,197
Multnomah, Ore.	20,295
Denver, Col.	20,010
Dist. of Columbia, D. C.	19,411
Dade, Fla.	18,212
Shelby, Tenn.	17,910
Alameda, Cal.	16,326
Jefferson, Ky.	15,132
Jefferson, Ala.	14,596
Middlesex, Mass.	13,831
Bexar, Tex.	13,129
Mecklenburg, N. C.	12,981
Franklin, Ohio	12,911
Hudson, N. J.	12,669
†Henrico, Va.	12,148
Oklahoma, Okla.	12,038
Duval, Fla.	11,981
Maricopa, Ariz.	11,902
Ramsey, Minn.	11,721
Douglas, Neb.	11,492
Hartford, Conn.	11,537
Monroe, N. Y.	11,041
Providence, R. I.	10,921
Salt Lake, Utah	10,869
*Norfolk, Va.	10,686
Onondaga, N. Y.	10,620
Davidson, Tenn.	10,428
Tarrant, Tex.	10,326
Hillsborough, Fla.	10,220
Tulsa, Okla.	9,935
Lucas, Ohio	9,823
New Haven, Conn.	9,704
Nassau, N. Y.	9,619
Union, N. J.	9,494
Westchester, N. Y.	9,410
Polk, Iowa	9,292
San Diego, Cal.	8,812
Fairfield, Conn.	8,488
Bergen, N. J.	8,221
Albany, N. Y.	8,104
Montgomery, Ohio	7,930
Sacramento, Cal.	7,480
Sedgwick, Kan.	7,436
Hampden, Mass.	7,267
Kent, Mich.	7,139
Worcester, Mass.	7,130
New Castle, Del.	5,735
Passaic, N. J.	6,594
Spokane, Wash.	6,536
Summit, Ohio	6,312
Dauphin, Pa.	5,821
Orange, Cal.	5,800
Pulaski, Ark.	5,799
Fresno, Cal.	5,729
Knox, Tenn.	5,684
Camden, N. J.	5,393
San Bernardino, Cal.	5,373
Guilford, N. C.	5,276
Hamilton, Tenn.	5,276
Caddo, La.	5,133
Santa Clara, Cal.	5,088
El Paso, Tex.	5,061
‡Potter, Tex.	5,006
Essex, Mass.	4,971
Cumberland, Me.	4,951
St. Louis, Minn.	4,816
Genesee, Mich.	4,793
Mobile, Ala.	4,792
Hidalgo, Tex.	4,678
Allen, Ind.	4,449
Kanawha, W. Va.	4,404
Bristol, Mass.	4,348
Orange, Cal.	4,272
Lehigh, Pa.	4,236
Pierce, Wash.	4,218
Polk, Fla.	4,200
Lancaster, Pa.	4,161
Montgomery, Pa.	4,142
Lake, Ind.	4,135
Total Above Counties	2,004,861
Industry Total	3,024,321
% of U. S.	66.3

* Includes Norfolk, Portsmouth, and South Norfolk Cities, Va.

† Includes Richmond City, Va.

‡ Combined with Randall County.

© SM, 1959.

Retail Trade Employment, Leading Counties

Selling to Retail Trade

By MILTON J. GREENEBAUM
President, Kirby, Block & Co.

Retailing has been going through important changes: Rapid growth of regional shopping centers and suburban branch stores; entry of super market chains into non-food merchandise; the development of more self-selection in all types of stores.

These changes have great significance to all who sell to retailers. More self-selection, for example, has brought with it a greater need for intelligent and attractive packaging of all types of merchandise. The company that has been farsighted in developing packaging that helps its products meet the new retail needs is far ahead of its competitors.

Today's retailers want help from manufacturers in providing selling information for the retail sales staff. Alert vendors can increase their volume by stressing their selling points to the retail personnel, whether it be through written messages or personal visits by well-trained sales people.

In the retail world, it is vital for stores to have what the customer wants when she wants it—not two weeks later. This is especially true of apparel, and it is, therefore, essential that manufacturers give prompt deliveries within the delivery period agreed upon.

Too much time is now spent by manufacturers in trying to copy someone else's product to sell at less money. What we need is creativity—more new products to offer to the consumer. It stands to reason that our buyers will give a receptive audience to the salesman who has a new product to show. Every retailer wants to be the first to offer new products.

But how dreadful it is when a salesman calls on a buyer to show a new fabric, for instance, and doesn't have accurate knowledge about its production, delivery dates, possibilities for continuity, and other features. Sometimes salesmen even call on our buyers without price lists. This is often true in hard-goods departments, where descriptions and specifications are of great importance.

SM Estimates, 1st Quarter, 1958, for 100 Counties With 54.2% of Employment

COUNTY and STATE	EMPLOYMENT SM Estimates 1st Quarter, 1958	COUNTY and STATE	EMPLOYMENT SM Estimates 1st Quarter, 1958	COUNTY and STATE	EMPLOYMENT SM Estimates 1st Quarter, 1958	COUNTY and STATE	EMPLOYMENT SM Estimates 1st Quarter, 1958	COUNTY and STATE	EMPLOYMENT SM Estimates 1st Quarter, 1958
New York, N. Y.	447,478	King, Wash.	45,778	Bergen, N. J.	27,635	Sacramento, Cal.	19,812	Camden, N. J.	14,950
Los Angeles, Cal.	306,449	Jackson, Mo.	45,068	Fairfield, Conn.	27,587	Lake, Ind.	19,538	Fresno, Cal.	14,748
Cook, Ill.	282,329	Marion, Ind.	44,731	Essex, Mass.	26,568	New Castle, Del.	19,533	Broward, Fla.	14,569
Wayne, Mich.	133,403	Hamilton, Ohio	44,418	*Norfolk, Va.	26,254	Tulsa, Okla.	19,521	Mahoning, Ohio	14,392
Philadelphia, Pa.	121,071	Fulton, Ga.	43,600	Summit, Ohio	25,356	Norfolk, Mass.	19,244		
Allegheny, Pa.	85,639	Alameda, Cal.	41,730	Montgomery, Ohio	25,190			Stark, Ohio	14,378
Cuyahoga, Ohio	83,618	Orleans, La.	37,279	Worcester, Mass.	25,189	Hillsborough, Fla.	18,881	El Paso, Tex.	14,335
Suffolk, Mass.	80,283	Franklin, Ohio	36,246			Delaware, Pa.	18,656	Luzerne, Pa.	14,296
Dist. of Columbia, D. C.	67,014	Hartford, Conn.	36,209	Ramsey, Minn.	24,487	Salt Lake, Utah	18,540	‡Arlington, Va.	13,948
Harris, Tex.	65,859			Oklahoma, Okla.	24,272	Passaic, N. J.	18,092	Mercer, N. J.	13,882
		San Diego, Cal.	36,054	Hampden, Mass.	23,774	San Bernardino, Cal.	17,362	Middlesex, N. J.	13,111
Baltimore City, Md.	62,670	Westchester, N. Y.	35,545	Lucas, Ohio	23,442	Sedgwick, Kan.	17,361	Dauphin, Pa.	12,963
Dallas, Tex.	57,881	Denver, Col.	35,483	Onondaga, N. Y.	22,972	Suffolk, N. Y.	16,950	Mobile, Ala.	12,898
Dade, Fla.	57,314	Bexar, Tex.	34,991	Hudson, N. J.	22,892	Kent, Mich.	16,811	Westmoreland, Pa.	12,878
St. Louis City, Mo.	57,033	Jefferson, Ky.	31,016	Oakland, Mich.	22,839	Bristol, Mass.	16,737	Spokane, Wash.	12,826
Milwaukee, Wis.	56,646	Monroe, N. Y.	30,934	Union, N. J.	22,315	St. Louis, Mo.	16,585		
Erie, N. Y.	55,928	Multnomah, Ore.	30,767	Santa Clara, Cal.	22,109			Total Above Counties	4,139,344
San Francisco, Cal.	52,486	Shelby, Tenn.	30,289	†Henrico, Va.	21,689	Pinellas, Fla.	16,430		
Middlesex, Mass.	52,170	Jefferson, Ala.	30,021			Albany, N. Y.	16,018	Industry Total	7,632,235
Nassau, N. Y.	50,896	New Haven, Conn.	29,169	Duval, Fla.	21,594	Genesee, Mich.	15,917		
Hennepin, Minn.	50,015			Orange, Cal.	21,420	San Mateo, Cal.	15,617	% of U. S.	54.2
		Maricopa, Ariz.	28,398	Davidson, Tenn.	21,278	Polk, Iowa	15,218		
Essex, N. J.	48,382	Tarrant, Tex.	28,004	Douglas, Neb.	20,242	Mecklenburg, N. C.	15,171		
		Providence, R. I.	27,836	Montgomery, Pa.	19,952				

* Includes Norfolk, Portsmouth and South Norfolk Cities, Va.
† Includes Richmond City.
‡ Includes Alexandria City, Va.

Finance, Insurance & Real Estate Employment, Leading Counties

SM Estimates, 1st Quarter, 1958, for 100 Counties with 73% of Employment

COUNTY and STATE	Total	Finance	Insurance	Real Estate	COUNTY and STATE	Total	Finance	Insurance	Real Estate	COUNTY and STATE	Total	Finance	Insurance	Real Estate
New York (5 Counties), N. Y.	375,692	128,738	123,849	123,305	Essex, N. J.	34,956	6,070	23,536	5,350	Cuyahoga, Ohio	25,738	9,400	8,836	7,502
Cook, Ill.	131,751	40,603	48,875	42,273	Dallas, Tex.	30,341	7,069	18,084	5,188	Harris, Tex.	21,204	7,010	9,772	4,422
Los Angeles, Cal.	104,224	38,903	39,365	26,056	Hartford, Conn.	30,179	4,269	24,080	1,830	Hennepin, Minn.	21,152	6,531	9,247	5,374
Philadelphia, Pa.	56,635	20,378	25,286	10,971	Baltimore City, Md.	27,648	5,583	12,333	5,722	Fulton, Ga.	20,419	5,538	10,455	4,426
Suffolk, Mass.	54,060	15,924	30,322	7,814	St. Louis City, Mo.	26,667	9,669	10,095	6,883	Jackson, Mo.	20,044	5,054	8,789	6,201
San Francisco, Cal.	43,734	14,614	22,843	6,277	Allegheny, Pa.	26,653	10,238	9,610	6,805	Milwaukee, Wis.	19,345	6,245	8,269	4,831
Wayne, Mich.	43,611	15,055	17,152	11,404	Dist. of Col., D. C.	25,906	5,976	7,851	12,081	Dade, Fla.	18,963	6,322	5,134	7,207

©SM, 1959.

Finance, Insurance & Real Estate Employment, Leading Counties

SM Estimates, 1st Quarter, 1958, for 100 Counties with 73% of Employment (Cont'd)

COUNTY and STATE	Total	Finance	Insurance	Real Estate
King, Wash.	18,249	5,633	7,489	5,127
Marion, Ind.	17,602	4,286	10,307	3,109
Hamilton, Ohio	16,326	5,632	7,254	3,440
Franklin, Ohio	14,964	3,297	9,217	2,450
Orleans, La.	14,744	4,928	7,052	3,066
Denver, Colo.	14,137	4,559	5,799	3,779
Erie, N. Y.	13,163	5,471	5,000	2,692
Duval, Fla.	12,786	2,717	8,238	1,831
Alameda, Cal.	12,527	4,336	5,008	3,183
Douglas, Nebr.	12,439	2,476	8,078	1,885
Multnomah, Ore.	12,077	4,412	4,642	3,023
Jefferson, Ala.	11,982	2,803	5,883	3,296
Jefferson, Ky.	11,169	3,596	5,292	2,281
Henrico, Va.	11,077	2,826	6,278	1,973
Providence, R. I.	10,725	3,955	5,001	1,769
Polk, Iowa	10,090	2,117	6,937	1,036
Oklahoma, Okla.	9,947	3,218	4,302	2,427
Bexar, Tex.	9,888	3,273	4,478	2,137
Nassau, N. Y.	9,802	4,141	2,454	3,207
Westchester, N. Y.	9,636	3,276	2,609	3,757
Ramsey, Minn.	9,635	3,218	4,746	1,671
Shelby, Tenn.	9,087	3,543	3,716	1,828
Tarrant, Tex.	8,898	2,856	4,349	1,693
San Diego, Cal.	8,816	4,001	2,830	2,185
New Haven, Conn.	9,569	3,417	3,483	1,669
Hudson, N. J.	8,425	3,137	1,847	3,441
Maricopa, Ariz.	8,340	3,429	3,414	1,497
Middlesex, Mass.	8,264	4,097	1,892	2,275
Hampden, Mass.	7,937	2,344	4,279	1,284
Monroe, N. Y.	7,522	3,902	2,613	1,307
Onondaga, N. Y.	7,395	2,304	4,047	1,044
Salt Lake, Utah	6,969	2,489	2,644	1,856
Mecklenberg, N. C.	6,966	2,312	3,067	1,587
Worcester, Mass.	6,807	2,471	3,339	997
Sacramento, Cal.	6,717	2,434	2,664	1,619
Fairfield, Conn.	6,598	3,126	1,586	1,886
Tulsa, Okla.	6,584	2,411	2,121	2,052
Davidson, Tenn.	6,527	2,315	3,009	1,203
Dauphin, Pa.	5,927	1,030	4,233	664
Orange, Cal.	5,840	2,152	1,922	1,766
Albany, N. Y.	5,710	2,216	2,499	995
Santa Clara, Cal.	5,653	2,738	1,269	1,646
Bergen, N. J.	5,525	2,305	942	2,278
Passaic, N. J.	5,409	2,561	1,150	1,686
*Norfolk Co., Va.	5,362	1,950	1,684	1,726
Lucas, Ohio	5,272	2,163	1,944	1,165
Guilford, N. C.	5,255	1,024	3,497	734
Montgomery, Ohio	5,196	2,108	1,562	1,506
Union, N. J.	5,118	2,129	1,364	1,625
Pulaski, Ark.	5,015	1,134	2,832	1,049
Sedgwick, Kans.	4,894	1,888	1,451	1,555
Hamilton, Tenn.	4,745	1,224	2,706	815
Kent, Mich.	4,714	1,904	2,137	673
Hillsborough, Fla.	4,606	1,517	2,113	978
Essex, Mass.	4,804	2,049	1,454	1,101
Pinellas, Fla.	4,576	1,795	799	1,982
Summit, Ohio	4,411	1,967	1,407	1,037
Broward, Fla.	4,405	1,296	593	2,516
St. Louis, Mo.	4,377	1,878	759	1,740
Camden, N. J.	4,320	1,808	1,397	1,115
Wake, N. C.	4,312	1,096	2,596	620
†Arlington, Va.	4,304	950	687	2,667
Orange, Fla.	4,295	1,112	2,053	1,130
Lake, Ind.	4,229	1,563	1,215	1,451
Allen, Ind.	4,178	961	2,851	566
New Castle, Del.	4,141	1,994	955	1,202
Hinds, Miss.	4,114	1,260	2,326	528
Norfolk, Mass.	4,107	1,824	645	1,638
Richland, S. C.	4,050	953	2,560	537
San Mateo, Cal.	3,931	1,212	1,240	1,479
Spokane, Wash.	3,913	1,462	1,120	1,331
Mobile, Ala.	3,908	1,344	1,206	1,358
Montgomery, Pa.	3,826	1,476	1,073	1,275
Delaware, Pa.	3,809	1,452	1,146	1,211
Mercer, N. J.	3,702	1,417	1,635	650
Dane, Wis.	3,597	881	2,188	528
St. Joseph, Ind.	3,589	1,988	1,133	490
Berks, Pa.	3,534	1,014	1,866	654
Peoria, Ill.	3,520	1,275	1,779	466
Total Above Counties	1,738,078	568,289	720,155	449,631
Industry Total	2,380,320	863,836	983,287	533,197
% of U. S. A. Total	73.0	65.8	73.2	84.3

* Includes Norfolk, Portsmouth and South Norfolk Cities, Va.

© SM, 1959.

† Includes Alexandria City.

Service Industries Employment, Leading Counties

Selling to Service Industries

By C. H. REILLY, JR.,
Manager, Purchase & Stores Div.
Department of Purchase & Administrative Services
The Port of New York Authority

It sounds elementary, but it needs to be said: Know who your prospects are, and let them know what you have to sell.

Supplier companies should not wait until a new product is in production and a comprehensive sales program established for it before they announce its availability. Rather, the market should be informed of a supplier's intent to produce a new or modified product. And it is particularly important that the manufacturer take special pains to see that purchasing departments of potential user-firms receive complete information.

The point is stressed because, in recent years, our purchasing department has found it necessary to devote increasingly more time to purchase research. We must do this to be assured that equipment purchased is not only the most modern available, but also the most economical.

A case in point: The Port of New York Authority's Aviation Department was in need of a runway vacuum sweeper for use at the airports. That department recommended to the purchasing department a machine calling for an investment of $36,000. This unit had been demonstrated and tested at one of the airports, and in the opinion of the staff responsible for its operation, was the best available.

At this point, purchasing research took over. No company, including the one whose equipment had been recommended, had ever approached the purchasing department and made known the availability of such equipment.

Fortunately, a member of the purchasing staff had been gathering information on sweepers, simply because a local-newspaper story had caught his attention. The news item had reported purchase of 92 units of a given make, pictured in the paper, by the United States Air Force.

Subsequent research and finally negotiations with the supplier resulted in our being able to buy a more modern and efficient version than that originally specified, at a cost of $20,100, or a saving of $15,900.

Tell, and keep on telling, your prospects what you have to sell!

From the old SIC to the new SIC—Page 53

Service Industries Employment, Leading Counties—(Cont'd)

SM Estimates, 1st Quarter, 1958, for 100 Counties with 63.7% of Employment

COUNTY and STATE	EMPLOYMENT SM Estimates 1st Quarter, 1958	COUNTY and STATE	EMPLOYMENT SM Estimates 1st Quarter, 1958	COUNTY and STATE	EMPLOYMENT SM Estimates 1st Quarter, 1958	COUNTY and STATE	EMPLOYMENT SM Estimates 1st Quarter, 1958	COUNTY and STATE	EMPLOYMENT SM Estimates 1st Quarter, 1958
New York, N. Y.	427,503	Alameda, Cal.	24,330	New Haven, Conn.	13,919	Polk, Iowa	9,704	St. Louis, Mo.	7,444
Los Angeles, Cal.	234,344	Orleans, La.	24,161	Monroe, N. Y.	13,601	Sacramento, Cal.	9,624		
Cook, Ill.	197,829	Erie, N. Y.	23,955	Clark, Nev.	13,794	Montgomery, Pa.	9,535	Albany, N. Y.	7,432
Wayne, Mich.	87,998	Nassau, N. Y.	23,337	Fairfield, Conn.	13,529	Summit, Ohio	9,524	Washoe, Nev.	7,380
Philadelphia, Pa.	89,591	San Diego, Cal.	22,879	Douglas, Neb.	12,890			Spokane, Wash.	7,347
Suffolk, Mass.	57,282	Marion, Ind.	22,749	Santa Clara, Cal.	12,289	Passaic, N. J.	9,461	Lake, Ind.	7,250
Dist. of Columbia, D. C.	54,856	Denver, Col.	22,473			Pinellas, Fla.	9,377	Fresno, Cal.	7,242
Allegheny, Pa.	51,100	Middlesex, Mass.	20,003	Bergen, N. J.	12,208	New Castle, Del.	9,075	Mercer, N. J.	7,168
Cuyahoga, Ohio	49,840			Hudson, N. J.	12,188	Kent, Mich.	8,915	Pulaski, Ark.	7,139
San Francisco, Cal.	49,171	Westchester, N. Y.	19,672	Lucas, Ohio	12,155	Hillsborough, Fla.	8,823	Travis, Tex.	7,104
		Multnomah, Ore.	18,962	Montgomery, Ohio	12,147	Hampden, Mass.	8,817	Delaware, Pa.	6,987
Dade, Fla.	47,717	Franklin, Ohio	18,740	Duval, Fla.	11,741	Palm Beach, Fla.	8,636	Bernalillo, N. M.	6,842
St. Louis City, Mo.	39,219	Shelby, Tenn.	18,106	Davidson, Tenn.	11,664	San Mateo, Cal.	8,599		
Harris, Tex.	37,573	Bexar, Tex.	17,816	Ramsey, Minn.	11,591	San Bernardino, Cal.	8,506	El Paso, Tex.	6,429
Dallas, Tex.	34,286	Maricopa, Ariz.	17,341	Orange, Cal.	11,328	Mecklenburg, N. C.	8,363		
Essex, N. J.	32,808	Hartford, Conn.	16,636	Tulsa, Okla.	10,945			Total Above Counties	2,618,482
Baltimore City, Md.	31,132	Jefferson, Ky.	16,563	Onondaga, N. Y.	10,901	†Henrico, Va.	8,348		
Hennepin, Minn.	29,343	Union, N. J.	15,833			Camden, N. J.	8,049	Industry Total	4,111,347
King, Wash.	28,754	Jefferson, Ala.	15,649	*Norfolk, Va.	10,840	Suffolk, N. Y.	8,045		
Jackson, Mo.	28,304			Essex, Mass.	10,485	Dauphin, Pa.	8,042	% of U. S.	63.7
Milwaukee, Wis.	27,473	Oklahoma, Okla.	14,771	Oakland, Mich.	10,115	Atlantic, N. J.	8,017		
		Tarrant, Tex.	14,540	Broward, Fla.	9,929	Riverside, Cal.	7,710		
Fulton, Ga.	27,035	Salt Lake, Utah	14,066	Sedgwick, Kan.	9,753	Norfolk, Mass.	7,554		
Hamilton, Ohio	25,576	Providence, R. I.	13,997	Worcester, Mass.	9,730	Pima, Ariz.	7,520		

* Includes Norfolk, Portsmouth and South Norfolk Cities, Va.

† Includes Richmond City, Va.

© SM, 1959.

Sales Management's Up-to-Date

1959 COUNTY OUTLINE RETAIL SALES MAP OF THE 50 UNITED STATES

Includes Alaska and Hawaii (also Canadian Markets)

Shows at a glance comparative Retail Sales Strength of every county . . . 27" x 41" . . . in 8 colors

1. All Metropolitan County Areas clearly defined.
2. County names . . . for all U. S. Counties . . . most legible of all the many outline maps we have seen.
3. Differences in retail sales volume indicated by 7 different County color shadings . . .
   - —for counties with $500 million or more.
   - —for counties with $250 million to $500 million.
   - —for counties with $100 million to $250 million.
   - —for counties with $50 million to $100 million.
   - —for counties with $25 million to $50 million.
   - —for counties with $10 million to $25 million.
   - —for counties with under $10 million.
4. 1750 cities with retail sales of $20 million or more.
5. City populations indicated—(as of January 1, 1959).
6. Special blown-up projections of all congested small-county areas, with county lines and names clearly indicated.
7. Special markings indicate counties whose family sales exceed U. S. family average.

PRICE: $4.50 a single copy; $3.50 each for two or more copies; $3.00 for five or more

SALES MANAGEMENT, 630 Third Avenue, New York 17, N. Y.

ADVERTISERS' INDEX

This Index is provided as an additional service. The publisher does not assume any liability for errors or omissions.

A

Aircraft & Missiles Manufacturing 133-134
Agency: Howard A. Harkavy, Inc.
American Machinist 121
Agency: Klau-Van Pietersom-Dunlop, Inc.
American Metal Market 76
Agency: Feeley Advertising, Inc.
Architectural Forum 57
Agency: Adams & Keyes, Inc.
Atlas Film Corp. 36
Automotive Industries 131
Agency: Howard A. Harkavy, Inc.
Aviation Week 16-17
Agency: Gaynor & Ducas, Inc.

B

Buffalo Courier-Express 51
Agency: The Rumrill Co.
Building Supply News 28-29
Agency: Wentzel & Fluge
Business Week ..... 4th Cover
Agency: Royal & DeGuzman

C

Chilton Company 24-25
Agency: Gray & Rogers
Civil Engineering 141
Agency: Persons Advertising, Inc.
Conover-Mast Purchasing Directory 9
Agency: The Schuyler Hopper Co.
Construction Equipment 145
Agency: The Schuyler Hopper Co.
Consulting Engineer 64
Agency: Waldie and Briggs, Inc.
Consumer Packaging 8
Agency: Frank C. Jacobi Advertising, Inc.
Contractors & Engineers 142-143
Agency: Howard A. Harkavy, Inc.
Creative Mailing Service, Inc. 52

D

Emil J. de Donato, Inc. 26
Denver Chicago Trucking Co., Inc. 47
Agency: Galen E. Broyles Co., Inc.

E

Electrical Manufacturing 125
Agency: Paul Smallen Advertising
Electrical West 128
Agency: Norton M. Jacobs

F

Fast Food 68
Fortune 61
Agency: Fuller & Smith & Ross Inc.
Foundry 113
Agency: Beaumont, Heller & Sperling, Inc.

G

Greensboro News-Record 37
Agency: Henry J. Kaufman & Associates
Gulf Publishing Company 107
Agency: Darwin Clark Co.

H

Heating, Piping & Air Conditioning 77
Agency: McLain & Associates
The Schuyler Hopper Co. 63

I

Industrial Distribution 2
Agency: Royal & deGuzman, Inc.
Industrial Equipment News 34
Agency: Tracy, Kent & Co., Inc.
Industrial Publishing Corporation 50
Agency: Dix & Eaton
Institute of Radio Engineers Directory .. 127
Agency: Raymond Schoonover, Advertising
The Iron Age 116-117
Agency: Gray & Rogers

L

Louisiana Dept. of Commerce & Industry 45
Agency: Gordon Advertising, Inc.
Lynchburg Chamber of Commerce 40

M

McGraw-Hill Publishing Co., Inc. 19
Agency: Fuller & Smith & Ross Inc.
Machine Design 79
Agency: Beaumont, Heller & Sperling, Inc.
Machinery 123
Agency: Wilson, Haight, Welch & Grover, Inc.
Marsteller, Rickard, Gebhardt and Reed, Inc. 39
Metal Progress 10-11
Agency: Bayless-Kerr Company
Mill & Factory 12
Agency: The Schuyler Hopper Co.
Miller-Freeman 41
Milprint 67
Agency: Baker, Johnson & Dickinson
Modern Tire Dealer 83

N

Nation's Business ..... 2nd Cover, 1
Agency: Gray & Rogers
New Equipment Digest 21
Agency: Beaumont, Heller & Sperling, Inc.
The New York Times 23
Agency: Altman-Stoller Advertising

P

Plant Engineering 55
Agency: Torkel Gundel & Associates
Plastics Technology 103
Power Engineering 59
Agency: Torkel Gundel & Associates
Purchasing Magazine 84
Agency: The Schuyler Hopper Co.
Purchasing Week 48-49
Agency: Fuller & Smith & Ross Inc.

R

Remington Rand 5
Agency: Gardner Advertising Co.
Rubber World 73

S

Scranton Times 38
Agency: Herald Advertising Agency, Inc.
Shoe Form Co., Inc. 60
Agency: Spitz Advertising Agency
South Bend Tribune 36
Agency: Lamport, Fox, Prell & Dolk

T

Thomas Publishing Company 33
Agency: W. N. Hudson Advertising
Time, Inc. 42-43
Agency: Young & Rubicam, Inc.

U

U. S. News & World Report 6-7
Agency: McManus, John & Adams
United Air Lines ..... 3rd Cover
Agency: N. W. Ayer & Son, Inc.
United Van Lines 4
Agency: Kelly, Zahrndt & Kelly

W

Wall Street Journal 27
Agency: Martin K. Speckter Associates
Western Architect and Engineer 140
Agency: Norton M. Jacobs
Western Aviation Magazine, Inc. 130
Wheaton Van Lines 40
Agency: Poorman, Butler & Associates

ADVERTISING SALES

VICE PRESIDENT, SALES
Randy Brown

SALES PROMOTION MANAGER
Philip L. Patterson

Asst. to Vice President, Sales
Cecelia Santoro

ADV. SERVICE MANAGER
Madeleine Singleton

PRODUCTION MANAGER
Virginia New

DIVISION SALES MANAGERS

New York—W. E. Dunsby, Wm. McClenaghan, Elliot Hague, Robert B. Hicks, Dan Callanan, F. C. Kendall, Ormond Black, 630 Third Ave., New York 17, N. Y., YUkon 6-4800.

Chicago—C. E. Lovejoy, Jr., Western General Manager; W. J. Carmichael, Western Advertising Director; John W. Pearce, Western Sales Manager; Thomas S. Turner, Thomas McDonough, 333 N. Michigan Ave., Chicago 1, Ill., STate 2-1266; Office Mgr., Vera Lindberg.

Pacific Coast—Warwick S. Carpenter, 15 East de la Guerra, Santa Barbara, Calif., WOodland 2-3612; (space other than publication or broadcasting accounts), M. A. Kimball Co., 2550 Beverly Boulevard, Los Angeles 57, Cal., DUnkirk 8-6178; or 681 Market St., San Francisco 5, Cal., Exbrook 2-3365.



AIR FREIGHT EXCLUSIVE

Central GHQ for cargo insures extra care for your shipment on United Air Lines

United Air Lines' unique Denver operating base includes centralized cargo control. This permits minute-to-minute scheduling of space on the more than 900 United flights daily. There's always a "right flight" for your cargo. When you call United, you're *promised* space (Reserved Air Freight) to any of 82 cities—and on as little as three hours' notice!

AND MORE "EXTRAS"

2000-community service. United serves more major markets than the combination of cities offered by any other line.

Largest high-speed cargo fleet. In addition to DC-6A Cargoliners, United passenger DC-7s and other Mainliners carry air freight.

Door-to-door pickup and delivery makes shipping United as effortless as dropping an Air Mail letter in the box.

Radar on every United Mainliner® helps guide shipments past delaying weather, helps you keep delivery promises.

FREE BOOKLET

tells how United Air Lines saves shippers money, provides better service. How about you? Just write to Cargo Sales Division, United Air Lines, 36 South Wabash Ave., Chicago 3, Illinois.



YOU PAY NO MORE FOR EXTRA CARE WHEN YOU SHIP UNITED AIR LINES

New study asks participants in 211 business purchases, "Who influenced decisions most?"







"Buying Influence Self-Analyzed," a field study by Crossley, S-D Surveys Inc., for Business Week, provides a new approach to the complex question of buying influence in business and industry.

Crossley's assignment: Get the actual participants in typical business purchases to rate themselves – *and each other participant* – as to amount of influence on the purchasing decision. Crossley selected 106 companies, obtained permission to interview all available participants in two recent purchases by each company. Half the purchases were of a routine or repetitive nature, the others were non-routine, non-repetitive.

Each participant was interviewed privately, asked to name the other participants, and then asked to rate himself and the others on a scale of 1 to 5—with 5 indicating maximum influence on the purchase.

By averaging these ratings, Crossley was able to rank, by influence, the participants in 211 business purchases.

The report of this study – now available – shows every one of these purchases: type and size of company, type and price of product bought, who participated and how he ranked in influence. What will impress you most, as you read it, is the active participation of management – and its decisive buying influence. Ask for a copy of "Buying Influence Self-Analyzed," from your Business Week representative . . . or from Research Manager, Business Week, 330 West 42nd Street, New York 36.



YOU ADVERTISE IN BUSINESS WEEK WHEN YOU WANT TO INFLUENCE MANAGEMENT MEN

A McGraw-Hill Magazine